

# Indiana's Auto Salvage Facilities Manual

**Featuring...**

- ✓ **Air requirements**
- ✓ **Hazardous Waste requirements**
- ✓ **Solid Waste requirements**
- ✓ **Water requirements**
- ✓ **Spill reporting requirements**
- ✓ **UST requirements**

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Compliance and Technical Program  
100 North Senate Avenue  
Indianapolis, IN 46204 - 2251  
Phone: toll-free at (800) 988-7901, or (317) 232-8172

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# INTRODUCTION

At the Indiana Department of Environmental Management (IDEM), our focus of attention is on the health of Indiana's resources -- the air, land and water -- so that we, and especially our children, can be healthy. We work in partnership with businesses, local governments, civic groups and the general public to meet Indiana's environmental challenges. It is with this partnership concept in mind that IDEM has developed this manual for use by the auto salvage facility sector.

This manual was initiated as part of an auto salvage sector project undertaken by IDEM in the fall of 2000, and funded in part by the United States Environmental Protection Agency (EPA).

More information can be found on IDEM's website at: [www.in.gov/idem/4993.htm](http://www.in.gov/idem/4993.htm)

Please check this website for new additions and updates on the project.

## ***What is the purpose of this manual?***

The purpose of this manual is to provide the auto salvage facility sector with concise, comprehensive environmental regulatory information in an easy-to-use format. This manual contains information concerning the various environmental rules with which auto salvage facilities must comply and for which IDEM has jurisdiction. Please note that this manual does not address all rules that apply to the auto salvage facility sector, only those over which IDEM has jurisdiction. There are other state and federal agencies, and potentially some local agencies that may have rules that regulate an auto salvage facility as well. A list of some of these agencies can be found at the end of this section.

## ***Who should use this manual?***

Owners and operators of auto salvage facilities in Indiana will find this manual the most helpful. Auto shredders may find the information contained within this manual helpful as well.

This manual is not geared toward one specific size of auto salvage facility. The information contained in this manual applies to all facilities, regardless of size. However, some rules may apply differently to facilities of differing size. For example, the chapter entitled; "Complying with the Hazardous Waste Rules" describes rules that apply to hazardous waste generators of different sizes. Therefore, if a facility generates a small amount of hazardous waste, it may be considered either a conditionally exempt small quantity generator or a small quantity generator. On the other hand, if a facility generates a relatively large amount of hazardous waste, it may be considered a large quantity generator. The specific rules that apply to a facility will differ, depending upon the size of generator it is. The storm water rules, however, apply equally to all facilities regardless of size. Read each section carefully to determine if and/or how each rule applies to a particular facility.

## ***Regulations covered***

This manual includes information on the following rules: Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Safe Drinking Water Act and Indiana's Solid Waste and Spill rules. As noted above, this manual does not contain information on rules administered by other local, state or federal agencies.

## ***Who to call for assistance***

If questions, concerns or the need for compliance assistance arises, please contact the appropriate IDEM office listed below.

- **IDEM's Spill 24-Hour Emergency Hotline:** (317) 233-7745 local and out-of-state or toll-free at (888) 233-7745 (in-state only).
- **IDEM's Office of Air Quality (OAQ):** (317) 233-0178 or toll-free at (800) 451-6027, request ext. 3-0178.
- **IDEM's Office of Land Quality (OLQ):**
  - **Emergency Response:** (317) 233-7745 or toll-free at (800) 451-6027, and request ext. 3-7745.
  - **Industrial Waste Compliance Section 1:** (317) 234-6951 or toll-free at (800) 451-6027, request ext. 4-6951.
  - **Solid Waste Compliance Section:** (317) 234-6965 or toll-free at (800) 451-6027, and request ext. 4-6965.
- **IDEM's Office of Pollution Prevention and Technical Assistance: *For Confidential Assistance:*** IDEM's Compliance & Technical Assistance Program (CTAP) at (800) 988-7901.
- **IDEM's Northern Regional office (South Bend):** (574) 245-4870 or toll-free at (800) 753-5519.
- **IDEM's Northwest Regional Office (Merrillville):** (219) 757-0265 or toll-free at 888/209-8892.
- **IDEM's Southwest Regional Office (Petersburg):** (812) 380-2305 or toll-free at (888) 672-8323.
- **IDEM's Southeast Regional Office (Brownstown):** (812) 358-2027
- **IDEM's Office of Water Quality (OWQ):**

- **General Information:** (317) 232-8670 or toll-free at (800) 451-6027, and request ext. 2-8670.
- **Information regarding Construction Permitting, Wastewater Treatment & Sanitary Sewers:** (317) 232-8670 or toll-free at (800) 451-6027, and request ext. 2-8670.
- **Information regarding Wellhead Protection:** (317) 232-8603 or toll-free at (800) 451-6027, and request ext. 2-8603 or visit the Web site on source water protection at: [www.in.gov/idem/4289.htm](http://www.in.gov/idem/4289.htm).
- **Information regarding Storm water Permitting:** (317) 232-8670 or toll free at (800) 451-6027, and request ext. 2-8670.
- **Information regarding Public Water Supplies (Drinking Water):** (317) 234-7435 or toll-free at (800) 451-6027, and request ext. 4-7435.

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Indiana Government Center North, Room 1207

100 North Senate Avenue, MC 50-07

Indianapolis, IN 46204

Phone: (317) 232-8667

Fax (317) 233-6647

Email: IDEMFILEROOM at [idem.in.gov](mailto:idem.in.gov)

Office hours are 8:30 am to 4:30 pm, Monday through Friday, excluding state holidays.

### ***Other State Agencies that may regulate an Auto Salvage Facility***

- **Indiana Department of Homeland Security-Fire & Building Safety**  
402 W. Washington Street Indianapolis IN 46204

Phone: (317) 232-2222

[www.in.gov/dhs](http://www.in.gov/dhs).

Plan Review Division

Phone: (317) 232-6418

Fax: (317) 232-6409

- **Indiana Department of Labor - INSafe**  
402 W. Washington Street Indianapolis IN 46204  
Phone: (317) 232-2655

[www.in.gov/dol](http://www.in.gov/dol)

\* The Indiana Department of Labor is responsible for enforcing Occupational Safety and Health Administration regulations in the state of Indiana. As a division of the Department of Labor, INSafe provides confidential compliance assistance to Indiana's regulated community through presentations, training programs, and site visits.

- **Indiana Department of Transportation (INDOT)**  
100 N. Senate Avenue, Room N848 Indianapolis IN 46204-2218  
Phone: (317) 232-5533

[www.in.gov/indot](http://www.in.gov/indot)

- **Indiana Bureau of Motor Vehicles**  
6400 East 30th Street Indianapolis IN 46219  
Phone: (317) 591-5303  
Fax: (317) 591-5319

[www.in.gov/bmv](http://www.in.gov/bmv)

### *Other sources of information*

- **National Spill Response Center**  
Phone: (800) 424-8802
- **EPA Ozone Protection Hotline**  
Phone: (800) 296-1996
- **EPA's automotive air conditioning**  
[www.epa.gov/ozone/title6/609](http://www.epa.gov/ozone/title6/609)
- **EPA's RCRA FAQs Database**

[waste.supportportal.com/ics/support/default.asp?deptID=23023](http://waste.supportportal.com/ics/support/default.asp?deptID=23023)

- **Local Health Departments**

For a list of local health departments, visit the Indiana State Department of Health's Web site at [www.in.gov/isdh/23926.htm](http://www.in.gov/isdh/23926.htm)

- **Publicly Owned Treatment Works (POTW)** (also called "local wastewater treatment plant" or "wastewater treatment plant")  
[www.in.gov/idem/4882.htm](http://www.in.gov/idem/4882.htm)

- then click on "45 Pretreatment cities", for a listing of the 45 POTWs with approved wastewater pretreatment programs.

- **Solid Waste Management Districts** [www.in.gov/recycle/5635.htm](http://www.in.gov/recycle/5635.htm)

- Then click on "Find Your Local SWMD", for the Directory of Indiana Solid Waste Management Districts and recycling and household hazardous waste programs.

## ACRONYMS & GLOSSARY

### *ACRONYMS*

BTU-----	British Thermal Unit
CTAP-----	Compliance and Technical Assistance Program (IDEM)
CESQG-----	Conditionally Exempt Small Quantity Generator
CFC-----	Chlorofluorocarbons
CFR-----	Code of Federal Regulations
CWA-----	Clean Water Act
EID-----	Energy Isolating Devices
EPA-----	United States Environmental Protection Agency
EPCRA-----	Emergency Preparedness & Community Right to Know Act
FP-----	Flash Point
HAP-----	Hazardous Air Pollutant
HFC-----	Hydrofluorocarbon
IAC-----	Indiana Administrative Code
IC-----	Indiana Code
IDEM-----	Indiana Department of Environmental Management
LDR-----	Land Disposal Restrictions
LEPC-----	Local Emergency Planning Committee

LQG-----	Large Quantity Generator
MSDS-----	Material Safety Data Sheet
MVAC-----	Motor Vehicle Air Conditioner
NESHAP-----	National Emissions Standards for Hazardous Air Pollutants
NPDES-----	National Pollutant Discharge Elimination System
NRC-----	National Response Center
OAQ-----	Office of Air Quality (IDEM)
O&M-----	Operations and Maintenance
OLQ-----	Office of Land Quality (IDEM)
OPPTA-----	Office of Pollution Prevention and Technical Assistance (IDEM)
OWQ-----	Office of Water Quality (IDEM)
P2-----	Pollution Prevention
PPE-----	Personal Protective Equipment
POTW-----	Publicly Owned Treatment Works
PVC-----	Polyvinyl Chloride
PWSS-----	Public Water Supply System
RCRA-----	Resource Conservation and Recovery Act
RQ-----	Reportable Quantity
SEMA-----	State Emergency Management Agency
SQG-----	Small Quantity Generator
TCLP-----	Toxicity Characteristic Leaching Procedure
TSD-----	Treatment, Storage, Disposal (facility)
UST-----	Underground Storage Tank
VOC-----	Volatile Organic Compound
WHPA-----	Wellhead Protection Area
WHPP-----	Wellhead Protection Program
WWTP-----	Wastewater Treatment Plant

## ***GLOSSARY***

### **Aerosol**

A suspension of liquid or solid particles in a gaseous medium.

### **Asbestos**

Naturally occurring fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, and in thermal insulation, fire proofing, and other building materials.

Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems.

**Catalytic Converter**

An air pollution abatement device that removes pollutants from motor vehicle exhaust, either by oxidizing them into carbon dioxide and water or reducing them to nitrogen and oxygen.

**Characteristic**

Any one of the four categories used in defining hazardous waste: ignitability, corrosivity, reactivity, and toxicity.

**Chlorinated Solvent**

An organic solvent containing chlorine atoms, e.g., methylene chloride and 1, 1, 1-trichloromethane, used in aerosol spray containers and in highway paint.

**Chlorofluorocarbons (CFCs)**

A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere they drift into the upper atmosphere where their chlorine components destroy ozone.

**Conditionally Exempt Small Quantity Generators (CESQG)**

Persons or enterprises that produce less than 220 pounds of hazardous waste per month and that meet the CESQG storage and disposal limitations. CESQGs are exempt from most hazardous waste regulations, but are required to determine whether their waste is hazardous, and keep records of the quantity generated and stored on site.

**Corrosivity**

Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels. Battery acid is an example. For more details, see 40 CFR §261.22.

**EPA**

An agency of the federal government of the United States created in 1970 and charged with protecting human health and with safeguarding the natural environment: air, water, and land. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. EPA is responsible for researching and settling national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance.

**EPA Identification Number**

RCRA requires individuals who generate or transport hazardous waste or who operate a TSD facility, to notify EPA or their authorized State waste management agency of their regulated waste activities and obtain a US EPA Identification Number (aka RCRA ID Number). An EPA ID Number is site-specific (except when issued to a transporter) and permanent (unless issued as a Provisional Number). It does not move with the current owner/operator should they relocate unless the owner/operator is a transporter.

**Friable Asbestos**

Any material containing more than one- percent asbestos and that can be crumbled or reduced to powder by hand pressure. (May include previously non-friable material which becomes broken or damaged by mechanical force).

**Gasoline Volatility**

The property of gasoline that causes it to change from a liquid to a vapor. Gasoline vapor is a volatile organic compound.

**Hazardous Air Pollutants**

Air pollutants, which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may reasonably be expected to cause or contribute to irreversible illness or death. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclide, and vinyl chloride.

**Hazardous Chemical**

An EPA designation for any hazardous material requiring an MSDS under OSHA's Hazard Communication Standard. Such substances are capable of producing fires and explosions or adverse health effects like cancer and dermatitis. Hazardous chemicals are distinct from hazardous waste. (See: Hazardous Waste.)

**Hazardous Material**

A substance or material capable of posing an unreasonable risk to health, safety or property when is transported in commerce.

**Hazardous Substance**

- 1) Any material that poses a threat to human health and/or the environment.
- 2) Any substance designated by EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or is otherwise released into the environment.

**Hazardous Waste**

By products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

**Ignitability**



Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 140 °F. Examples include waste oils and used solvents.

**Incompatible Waste**

A waste unsuitable for mixing with another waste or material due to possible reactions between the materials that may form a hazard.

**Large Quantity Generator**

Person or enterprises generating more than 2200 pounds of hazardous waste per month. Such generators produce about 90 percent of the nation's hazardous waste and are subject to all RCRA requirements.

**Manifest (Uniform Hazardous Waste Manifest Form 8700-22)**

This manifest is used to identify the quantity, composition, origin, routing and destination of a hazardous waste.

**Manifest System**

Tracking of hazardous waste from "cradle to grave" (generation through disposal) with accompanying documents known as manifests.

**Material Safety Data Sheet (MSDS)**

A compilation of information required under the OSHA Communication Standard on the identity of hazardous chemicals, health, and physical hazards, exposure limits, and precautions. §311 of SARA requires facilities to submit MSDSs under certain circumstances.

**Mercury Switch**

A convenience light switch that:  
(1) is located in the hood or trunk lid of a motor vehicle; and  
(2) contains mercury.

**National Pollutant Discharge Elimination System (NPDES)**

A provision of the Clean Water Act which prohibits discharge of pollutants into waters of the United States unless a special permit is issued by EPA, a state, or, where delegated, a tribal government on an Indian reservation.

**Ozone Depletion**

Destruction of the stratospheric ozone layer which shields the earth from ultraviolet radiation harmful to life. This destruction of ozone is caused by the breakdown of certain chlorine and/or bromine containing compounds (chlorofluorocarbons or halons) which break down when they reach the stratosphere and then catalytically destroy ozone molecules.

**Permit**

An authorization, license, or equivalent control document issued by EPA or an approved state agency to implement the requirements of an environmental regulation; e.g., a permit to operate a wastewater treatment plant or to operate a facility that may generate harmful emissions.

**Propellant**

A compressed inert gas, such as a fluorocarbon, that acts as a vehicle for discharging the contents of an aerosol container.

**Publicly Owned Treatment Works**

A waste treatment works owned by a state or unit of local government usually designed to treat domestic wastewater.

**Release**

The deposit of material into the environment through deliberate or accidental means (e.g., spilling, leaking, or pouring material out).

**Sanitary Sewers**

A system of underground pipes that transports sewage from houses and industry to treatment or disposal.

**Septic System**

An onsite system designed to treat and dispose of domestic sewage. A typical septic system consists of a tank that receives waste from a residence or business and a system of tile lines or a pit for disposal of the liquid effluent (sludge) that remains after decomposition of the solids by bacteria in the tank and must be pumped out periodically.

**Small Quantity Generator (SQG)**

Persons or enterprises that produce between 220 and 2,200 pounds per month of hazardous waste and that meet the SQG storage and disposal limitations.

**Storm Sewers**

Underground system of pipes that carry off only storm water (as opposed to a sanitary sewer or a combined sewer).

**Sump**

A pit or tank that catches liquid runoff for drainage or disposal.

**Suspect Material**

Building material suspected of containing asbestos, e.g., surfacing material, floor tile, ceiling tile, thermal system insulation, and miscellaneous other materials.

**Tampering**

Adjusting, negating, or removing pollution control equipment on a motor vehicle.

**Treatment, Storage, Disposal (TSD) facility**

A facility that treats, stores or disposes of hazardous wastes.

**Used Oil**

Oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

Examples include engine oil, sludge from used oil tanks, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, etc.

**Wastewater**

The spent or used water from a home, community, farm, or industry that contains dissolved or suspended matter.

**Wellhead Protection Area**

A protected surface and subsurface zone surrounding a well or wellfield supplying a public water system to keep contaminants from reaching the well water.

## **ENVIRONMENTAL REGULATIONS THAT MAY APPLY TO A FACILITY**

### ***AIR REGULATIONS***

There are number of Clean Air Act (CAA) regulations that may apply to a facility, depending upon the types of activities conducted. They include the following:

**Catalytic Converters**

The 1970 Clean Air Act prompted the creation of catalytic converters, which reduce harmful vehicle emissions by as much as 90 percent. Catalytic Converters may be removed and sold to a scrap metal recycler. See the “Potential Waste Streams” chapter for additional information on catalytic converters.

**Chlorinated Solvents (for parts washing, etc.)**

Chlorinated solvents (see listing below) that are used in containers with a capacity of 2 gallons or greater are regulated by EPA. Any non-chlorinated solvent that has a chlorinated solvent content of two percent (2%) or more will also fall under this regulation. Facilities using chlorinated solvents in the quantities or percentages described above must follow the regulations under the National Emissions Standards for Hazardous Air Pollutants (NESHAP). The NESHAP requires

facilities to install equipment and implement standardized work practices to reduce the emissions of hazardous air pollutants. Due to the complexity of the regulations that apply to chlorinated solvents, this manual does not address the chlorinated solvent NESHAP in detail. Contact IDEM's Office of Air Quality at (317) 233-0178 (toll-free at (800) 451-6027, and request ext. 3-0178) for assistance.

Chlorinated solvents include:

- Chlorobenzene (Monochlorobenzene Or Benzene Chloride)
- Trichloroethylene (Trichloroethane, Ethinyl Trichloride)
- Chlorinated Fluorocarbons
- Methylene Chloride (Dichloromethane, Methylene Dichloride, Methylene Bichloride)
- Tetrachloroethylene (Perchloroethylene, Ethylene Tetrachloride, Tetrachlorethylene)
- 1,1,1-Trichloroethane (Methyl Chloroform, Chlorothene)

Chlorinated solvents are listed hazardous wastes (see the chapter entitled "Complying with the Hazardous Waste Rules" for a discussion of listed hazardous wastes). Any time a waste is contaminated with a listed hazardous waste, the mixture is automatically considered to be a hazardous waste, regardless of the concentration of listed waste.

*Keep in mind that using even a small quantity of liquid chlorinated solvents may result in a facility's needing to follow significant environmental regulations.*

### **Solvents Used by Facilities in Lake, Porter, Clark and Floyd Counties**

A 1998 air regulation restricts the type of parts washing solvent that may be used in these four counties. Solvents must have a vapor pressure not to exceed one millimeter of mercury (1.0 mmHg).

This restriction applies when a solvent is sold to an individual or business in amounts greater than five (5) gallons during any seven (7) consecutive business days.

Some vendors already sell solvents that meet the new vapor pressure limit. Check the MSDS sheet to ensure that the solvent meets this vapor pressure limit. If a facility is currently using a solvent of this type, the only additional requirement is to keep records of the purchases.

End users of solvents must also keep a record of each purchase, including the following information:

- Name and address of the solvent supplier;
- Date of purchase, the type of solvent;
- Volume of each unit;
- Total volume of the solvent; and
- Vapor pressure of the solvent.

Information concerning aqueous-based and petroleum based solvents is contained in the chapter entitled “Potential Waste Streams”.

**WARNING:** The Office of Air Quality may propose in the future to have these requirements apply on a statewide basis. If this occurs, then it may be necessary to change your solvent in the future.

### **Additional Requirements for Solvents Used by Facilities**

Additionally, facilities with cleaning solvent operations that are located in Clark, Elkhart, Floyd, Lake, Marion, Porter and St. Joseph Counties existing as of July 1, 1990 shall attain compliance with these requirements no later than July 1, 1991. Also, any new facility, construction of which commences after July 1, 1990 located in any county is required to do the following:

- Equip the cleaner with a cover;
- Close the cleaner cover whenever parts are not being handled in the cleaner;
- Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- Provide a permanent, conspicuous label summarizing the operation requirements;
- Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing; and
- Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
  - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
  - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

### **Fugitive Dust from Unpaved Parking Lots**

If a facility has unpaved parking lots, the facility must prevent the dust from blowing off the property. Under no circumstance should used oil be applied as a dust suppressant. A list of dust suppressants and suppliers is available through IDEM’s Web site at: [www.in.gov/idem/files/la-031-gg.pdf](http://www.in.gov/idem/files/la-031-gg.pdf)

Auto salvage facilities that remove freon from MVAC systems are required to use EPA approved recovery and/or recycling equipment. See the “Potential Waste Streams” chapter for more

information and requirements pertaining to the use, handling and transfer of recovered refrigerants. Information on EPA-approved equipment and EPA-accredited training programs is available via EPA's Web site, along with information on complying with the Section 608 Refrigerant Recycling Rule: [www.epa.gov/spdpublic/title6/608/608fact.html](http://www.epa.gov/spdpublic/title6/608/608fact.html)

### ***Open burning***

Open burning by businesses is prohibited. However there are a few exceptions. Refer to the chapter entitled, "Notifications and Permitting" for a more detailed discussion of this topic.

### ***SPILL REGULATIONS***

Spills that occur on a facility's property must be immediately cleaned up and properly disposed. For a comprehensive discussion of responsibilities when a spill occurs, refer to the chapter entitled, "Spill Prevention, Reporting and Remediation".

### ***UNDERGROUND STORAGE TANK REGULATIONS***

For a definition of "underground storage tank" and a discussion of the requirements that tanks must adhere to, refer to the chapter entitled "Notifications and Permitting."

### ***WASTE REGULATIONS***

#### **Hazardous Waste**

A number of requirements may apply to a facility if it is a small quantity or large quantity generator of hazardous waste. For a comprehensive discussion of these requirements, refer to the chapter entitled, "Complying With Hazardous Waste Rules".

#### **Solid Waste**

At **no time** should open dumping or the burying of solid waste occurs. Open dumping is the improper and illegal disposal of regulated solid waste at an unpermitted solid waste disposal site. Examples of solid waste include the following:

- Appliances
- Furniture
- Waste Tires
- Plastic
- Cardboard
- Household Garbage
- Household Building Debris

- Construction And Demolition Waste
- Hazardous Waste

All solid waste generated as a result of activities conducted at a facility should be properly disposed of in a state permitted facility such as a landfill, transfer station, incinerator or recycling facility.

## ***WATER REGULATIONS***

### **Drinking Water**

If a facility provides water to its customers or the general public, it may be considered a public water system. A public water system includes any collection, treatment, storage, and distribution facilities under the control of the system. There are primarily two categories of public water systems that could apply to the auto salvage facility sector. If a facility provides water to the public via public restrooms or drinking water fountains, that facility is considered a “transient non-community water system”. If a facility regularly serves the same twenty-five or more persons at least six months of the year, the facility is considered a “non-transient, non-community water system”. If a facility fits either of the two descriptions provided above, it would also be required to comply with IDEM's drinking water regulations. To obtain additional information concerning these regulations, please contact IDEM's Drinking Water Branch at (317) 234-7435 or visit their Web site at: [www.in.gov/idem/4868.htm](http://www.in.gov/idem/4868.htm)

For information concerning permitting requirements for this type of activity, see the chapter entitled, “Notifications and Permitting”.

### **Motor vehicle waste disposal wells**

A motor vehicle waste disposal well (MVWD well) is a type of Class V injection well. Typically they are shallow disposal systems that receive or have received fluids from vehicle repair or maintenance activities, or any area where work on vehicles is performed. In general, these wells are areas that are tied into a shallow disposal system. Most often, these disposal systems are septic systems or dry wells, but any underground system that receives motor vehicle waste would be considered a MVWD well. Some examples include: cesspools, catch basins, sinkholes, underground vaults, or drain tanks. See “Motor Vehicle Waste Disposal Wells” in the “Notifications and Permitting” chapter, for permitting requirements that apply to these wells.

### **Septic systems**

Sanitary wastewater generated at a facility may be discharged to an on-site septic system. Industrial wastewater may not be discharged to a septic system. See the section above entitled, “Motor Vehicle Waste Disposal Wells” for additional discussion on wastes and septic systems.

## **Spills into Navigable Waters**

Depending on a facility's total aboveground storage capacity for all types of oils it keeps onsite (petroleum, synthetic, animal, or vegetable; product or waste), it may be subject to the federal Spill Prevention, Control and Countermeasure (SPCC) rule (40 CFR 112). See Emergency Plans, Recordkeeping/Reporting Requirements, and Employee Training.

## **Storm water**

Auto salvage facilities are potentially regulated under IDEM's Rule 6 Industrial Storm Water General Permit requirements. Refer to the chapter entitled "Notifications and Permitting" for a detailed discussion of the storm water requirements.

## **Wastewater**

Auto salvage facilities may be subject to industrial wastewater regulations administered by IDEM's Office of Water Quality and/or a local wastewater treatment plant, depending upon where the facility's drains discharge and the constituents present in its wastewater. Refer to the chapter entitled "Notifications and Permitting", for additional information.

## **Wetlands**

Swamps, marshes, bogs, fens, sloughs and bottomlands are examples of areas that may be considered wetlands. In general, wetlands are areas where water accumulates at or near the surface for some part of the year. An owner of an auto salvage facility wishing to discharge pollutants (any material that might negatively affect the area) to wetlands or other water bodies must first receive authorization from IDEM, the Indiana Department of Natural Resources and the U.S. Army Corp of Engineers to do so. Activities such a filling, excavating or mechanical clearing will also require authorization. Refer to the chapter entitled "Notifications and Permitting" for a detailed discussion of the permitting requirements for this activity.

# **COMPLYING WITH THE HAZARDOUS WASTE RULES**

Depending upon the activities conducted at a facility, it may be subject to Indiana's hazardous waste rules. Determining which, if any, hazardous waste rules apply to a facility involves three different steps:

1. Determine whether any hazardous waste is generated.
2. Determine a facility's generator status.
3. Determine which regulations must be complied with depending upon a facility's generator status, and comply with those requirements.



In order for a facility to fully understand each of these steps, an explanation of each is provided below.

## ***DETERMINE WHETHER ANY HAZARDOUS WASTE IS GENERATED***

It is critical that this step is completed properly. If it is not, serious compliance problems could result, due to the fact that a facility may then be out of compliance with the steps listed above. Before a facility can determine whether it generates any hazardous waste, hazardous waste has to be defined! Worksheets 1 and 2 will assist a facility in identifying and classifying the various waste streams generated at the facility.

***What is hazardous waste?*** There are a few steps involved in determining whether any wastes generated by the facility are hazardous. A facility must first determine whether any solid wastes are generated. Since hazardous waste is a “subset” of solid waste, if no solid waste is generated, then no hazardous waste is generated!

The term “solid waste” can be somewhat misleading. The word “solid” does not refer to the physical state of the waste. Solid waste can be a solid, liquid, or contained gas. Under the hazardous waste rules, generally, a solid waste is any material that will no longer be used for its originally intended purpose, or a material that must be reclaimed before reuse. A facility will need to look at each of the waste streams generated (e.g., antifreeze, used oil, solvents, etc.) and determine whether it is a solid waste.

Note that not all solid wastes are considered hazardous wastes. Certain solid wastes, such as used oil destined for recycling, are excluded from the hazardous waste rules.

If a facility finds that one or more wastes generated meet the definition of a “solid waste”, then a determination must be made to identify any hazardous wastes. Wastes can be hazardous if they are either “listed” or “characteristic”, or if it is a mixture of a listed hazardous waste and other wastes.

### **Listed wastes**

Waste is considered hazardous if it is found on any one of four “lists”. These “lists” are called the “F”, “K”, “P” and “U” lists.

**F-list** (i.e., non-specific source wastes). This list identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources.

**K-list** (i.e., source-specific wastes). This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes.

**P and U-list** (discarded commercial chemical products). These contain discarded or unused commercial chemical products, off-specification products, container residues and spill residues of these products. Some pesticides and some pharmaceutical products become hazardous waste when discarded.

## Characteristic wastes

Once a facility has reviewed the F, K, P and U lists, and determined whether generated wastes are found on any of the lists, then a determination will need to be made to see if the remaining wastes are “characteristic” hazardous wastes. There are four different characteristics: ignitability, corrosivity, reactivity, and toxicity.

- **Ignitable waste.** These are wastes that can readily catch fire and sustain combustion.
  1. A liquid is ignitable if it has a flash point less than 140 degrees Fahrenheit.
  2. A waste is also considered ignitable if it is an oxidizer or an ignitable compressed gas (as defined by U.S. Department of Transportation regulations).
  3. A solid is ignitable if it has the potential to ignite under standard temperature and pressure through the absorption of moisture or spontaneous chemical changes and when ignited burn persistently and vigorously.

Examples of ignitable wastes commonly found in auto salvage yards include solvents, paint wastes, degreasers, and compressed gases like acetylene and propane. Ignitable wastes carry the hazardous waste code designation of D001.

- **Corrosive waste.** These are acidic or alkaline (basic) wastes that can readily corrode or dissolve flesh, metal or other materials. There are two criteria to use when identifying corrosive hazardous wastes.
  1. The first is a pH test. Wastes with a pH less than or equal to 2 or greater than or equal to 12.5 are corrosive.
  2. A waste may be corrosive if it has the ability to corrode steel at a rate of more than 0.25 inches per year under conditions specified in a particular EPA test.

Examples of corrosive wastes include waste battery acid, waste acid or alkaline cleaning fluids and waste rust removers. Corrosive wastes carry the hazardous waste code designation of D002.

- **Reactive waste.** A waste is reactive if it exhibits any of the following characteristics:
  1. It is normally unstable and readily undergoes violent change without detonating.

2. It reacts violently with water.
3. It forms potentially explosive mixtures with water.
4. It produces fumes, gases, and vapors when mixed with water.
5. It is a cyanide or sulfide bearing waste that can generate toxic gases, vapors, and fumes when exposed to pHs between 2-12.5.
6. It is capable of detonation or explosive reaction when exposed to a strong ignition source or is heated under confinement
7. It is capable of detonation, explosive decomposition, or reaction at standard heat or pressure.
8. It is a forbidden explosive as defined in 40 CFR 173.51 or a Class A ( 49 CFR 173.53) or Class B explosive (49 CFR 173.88).

Examples of reactive wastes include certain cyanide or sulfide bearing wastes. Reactive wastes carry the hazardous waste code designation of D003.

- **Toxic waste.** Wastes that are harmful or fatal when ingested or absorbed, or leach toxic chemicals into the soil or groundwater when disposed of on land are considered toxic waste. A facility can determine if the waste is toxic by having it tested using a test called the Toxicity Characteristic Leaching Procedure (TCLP). If the waste contains any of the 40 regulated contaminants at concentrations equal to or greater than the regulatory levels, then the waste exhibits the toxicity characteristic. Examples of toxic waste include wastewater treatment sludge and pesticide/herbicide wastes. Toxic wastes carry the hazardous waste code designation of D004 through D043 (each toxic constituent present in the waste has its own hazardous waste code designation).
- **Mixtures of listed wastes and other wastes.** A mixture containing a nonhazardous solid waste and any amount of a listed hazardous waste is considered a hazardous waste. For example, if a pint of spent solvent such as toluene or benzene (an F005 listed hazardous waste) is mixed with a 55 gallon drum of waste antifreeze, the entire mixture (e.g., 55 gallons plus one pint) is considered a hazardous waste (as opposed to only one pint being a hazardous waste had the two wastes not been mixed). Hence, it is very important to keep wastes segregated, because it's better for the environment and will reduce disposal costs (it's more expensive to dispose of hazardous waste than it is solid waste).
- **Universal Wastes.** Universal wastes include nickel cadmium and lead-acid batteries (see optional requirements in 40 CFR 266), agricultural pesticides, thermostats and lights/lamps (e.g., fluorescent, high-intensity discharge, neon, mercury vapor, high-pressure sodium and metal halide lamps), mercury switches and mercury-containing devices. Universal wastes have fewer waste management rules that apply to them. For more information about the generation, storage, transportation and disposal of universal wastes, refer to IDEM's guidance document entitled, "Universal Waste Rule", available on IDEM's Web site at: [www.in.gov/idem/files/universalwasterule.pdf](http://www.in.gov/idem/files/universalwasterule.pdf)

*Must a facility test its waste to determine if it's hazardous or can prior knowledge of the waste suffice?*

Either can be done. It may be more accurate to have each waste stream analyzed, but knowledge of the waste can also be used to make the determination. For additional information on making a waste determination, refer to the IDEM publications entitled “How To Identify Waste & Determine If It's Hazardous Waste” and “Understanding the Hazardous Waste Determination Process”. These publications can be obtained from IDEM's Web site at [www.in.gov/idem/5043.htm](http://www.in.gov/idem/5043.htm) and [www.in.gov/idem/catalog/guidance/la-062-gg.pdf](http://www.in.gov/idem/catalog/guidance/la-062-gg.pdf). Keep in mind that it is a facility's responsibility to ensure that a proper hazardous waste determination is made for each solid waste. If a facility hires a consultant to perform waste determination activities, the facility is still liable for any incorrect determinations that may be made.

## ***DETERMINING GENERATOR STATUS***

Once a facility has determined whether or not it generates hazardous waste, how much waste is generated on a monthly basis must be determined. This will help a facility determine its hazardous waste generator status. Table 1 (Determining Generator Status), lists whether a waste stream must be included in the waste generation calculation.

There are three generator categories into which a facility might fall:

- Conditionally exempt small quantity generator (CESQG),
- Small quantity generator (SQG) and
- Large quantity generator (LQG).

The type of generator a facility is (e.g., generator status) is determined on a monthly basis and depends upon the amount of hazardous waste a facility generates within that calendar month.

It will be noted that the measurements listed in each of the categories are in pounds and kilograms. Many hazardous wastes are liquids and are measured in gallons. In order to measure a facility's liquid wastes, the facility will need to convert from gallons to pounds. To do this, density of the liquid must be known. A rough guide is that 30 gallons (about half of a 55-gallon drum) of waste with a density similar to water weighs about 220 pounds (100 kg); 300 gallons of a waste with a density similar to water weighs about 2,200 pounds (1,000 kg).

Table 1: Determining Generator Status

<b>GENERATOR STATUS</b>	<b>AMOUNT OF HAZARDOUS WASTE GENERATED PER MONTH</b>	<b>ON-SITE ACCUMULATION TIME</b>	<b>ON-SITE QUANTITY LIMIT</b>
Conditionally Exempt Small Quantity Generator (CESQG)	< or = to 220 pounds (approximately one half of a 55-gallon drum) < or = to 2.2 pounds of acutely haz. waste < or = to 220 pounds of acutely haz. spill residue	N/A	1,000 kg** 1kg acute*** 100 kg acute spill residue***
Small Quantity Generator (SQG)	Between 220 and 2,200 pounds (approximately one half to four 55-gallon drums)	No more than 180 days on site or 270 days if shipped 200 miles or more *	6,000 kg (approximately thirty 55-gallon drums)
Large Quantity Generator (LQG)	2,200 pounds or more (more than four 55-gallon drums)	No more than 90 days on site	No Limit
<p>* Hazardous waste that is transported more than 200 miles away for recovery, treatment, or disposal can be stored for up to 270 days.</p> <p>** If a facility generates/accumulates more than the amount listed, it is subject to additional requirements.</p> <p>*** If a facility generates/accumulates more than this amount, it is subject to LQG requirements.</p>			

***DETERMINE WHICH REQUIREMENTS A FACILITY MUST COMPLY WITH DEPENDING UPON A FACILITY'S GENERATOR STATUS, AND COMPLY WITH THOSE REGULATIONS***

Once a facility has determined its generator status, a determination can be made which hazardous waste rules the facility must comply with. CESQGs have the smallest number of rules to comply with; LQGs have the largest number. A key point to remember when determining the requirements that apply to a facility, is that generator status can change from month to month. Say, for example, that a facility generates less than 220 pounds (100 kg) of hazardous waste during the month of February. During that month, the facility would be considered a CESQG and would be required to comply with the hazardous waste requirements that apply to CESQGs. Continuing with our example, say that, during the month of March, a facility generates 550 pounds of hazardous waste. Since 550 pounds falls between the SQG accumulation amount of 220 and 2,200 pounds, a facility would be considered an SQG for the month of March and would be required to comply with the requirements that apply to SQGs. You must continue to comply with the SQG requirements until the waste on site, which exceeded the quantity limit was exceeded, is shipped off site.

See the Generator Summary Chart, included at the end of this chapter, for a summary of the requirements that apply to each generator category. The numbers in each of the boxes in the table are sections within Title 40 of the Code of Federal Regulations (CFR).

Referring to these sections within the CFR will provide a facility with specific details as to each of these requirements. The CFR can be found on the Internet at [www.gpoaccess.gov/cfr/index.html](http://www.gpoaccess.gov/cfr/index.html)

In addition, a facility may wish to consult EPA's document entitled, "Managing Your Hazardous Waste; A Guide for Small Businesses" for additional information on these requirements. This document can be obtained by visiting EPA's Web site at: [www.epa.gov/osw/hazard/generation/sqg/handbook/k01005.pdf](http://www.epa.gov/osw/hazard/generation/sqg/handbook/k01005.pdf)

There are a number of benefits to reducing the amount of hazardous waste a facility disposes of. First, by increasing the amount of hazardous waste that is reclaimed or recycled, the costs associated with disposal of the waste are avoided. Second, by reclaiming or recycling hazardous waste, the liability associated with the disposal of hazardous waste is limited. This is because the liability associated with any hazardous waste that is sent away for disposal does not end when it is shipped off-site. A facility is still potentially liable for cleanup costs under Superfund for any mismanagement of hazardous waste once it reaches the disposal facility. Third, reclaiming or recycling waste is much better for the environment and the community!

Worksheet 1: Inventory of Solid and Hazardous Waste Streams

Waste	Generated from:	SW (y/n)	HW (y/n)


Worksheet 2: Generator Size Determination

<b>Hazardous Waste</b>	<b>Generated from:</b>	<b>Hazardous Waste Code(s)</b>	<b>Average Amount generated/month</b>

Table 2: Summary of the Hazardous Waste (HW) Status of Wastes Generated by a Typical Auto Salvage Facility

<b>Product/Waste</b>	<b>Description/Mgt. Option</b>	<b>Hazardous Waste (HW) Status</b>	<b>Counted Toward Generator Status (if determined to be a Haz. Waste)</b>
Aerosol Cans	Recycled or Disposed - Emptied	Not a HW	
	Recycled or Disposed – Not Emptied	Make a HW Determination and manage accordingly	
Antifreeze	Recycled	Make hazardous waste determination	
	Disposed	Make a HW determination and manage accordingly	
Batteries	Recycled, managed as Universal Waste or except	Not counted in determining HW	

	under 40 CFR 266.80	generator status	
	Disposed	HW	
Brake & Clutch Repair (Asbestos)	Disposed – Not contaminated with a HW	Not a HW	
	Disposed - Contaminated with a HW (such as from some brake cleaners)	Must make a HW determination and manage accordingly	
Catalytic Converters	Recycled or Disposed	Not a HW, but subject to IDEM's air rules	
Fluorescent Light Tubes & HID Lamps	Recycled as Universal Waste	Not counted in determining HW generator status	
	Disposed	Must make a HW determination and manage accordingly	
	Reused for its intended purpose or re-refined	Not a HW	
Fuel	Disposed	Must make a HW determination and manage accordingly	
Fuel Filters	Disposed	Must make a HW determination and manage accordingly	
Metal Parts	Recycled	Not a HW	
	Disposed	Not a HW	
Mercury Switches	Recycled	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	
Oil (Used)	Recycled (under the Used Oil Rule)	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	
Oil Filters (Used & Terne Plated)	Recycled as scrap metal	Not a HW	
	Disposed	Must make a HW determination and manage	



		accordingly	
Oil Filters (Used & Non-Terne Plated)	Recycled - Drained	Not a HW	
	Recycled - Undrained(managed under the Used Oil Rule)	Not a HW	
	Disposed - Drained	Not a HW	
Oil Filters (Used & Non-Terne Plated) [con't]	Disposed - Undrained	Must make a HW determination and manage accordingly	
Refrigerants	Recycled - Not contaminated	Not a HW	
(MVAC)	Disposed - Contaminated	Must make a HW determination and manage accordingly	
Solvents (Aqueous-Based)	Disposed	Must make a HW determination and manage accordingly	
Solvents(Petroleum-Based)	Reused for its originally intended purpose OR reused w/o first being reclaimed	Not a HW	
	Recycled or Disposed	Must make a HW determination and manage accordingly	
Sorbents	Recycled under the Used Oil Rule (if contaminated with used oil only)	Not a HW	
	Disposed(or unable to manage under the Used Oil Rule due to contamination with materials other than used oil)	Must make a HW determination and manage accordingly	
Tires	Recycled or Disposed	Not a HW, but subject to the Used Tire Rule or the Solid Waste rules	
Wastewater	Sent directly to the sanitary sewer	Not a HW, but subject to POTW's and IDEM's	

		regulations	
Wipes	Recycled(under the Used Oil Rule if contaminated with used oil only)	Not a HW	
	Recycled	Must make a HW determination and manage accordingly	
Wipes (con't)	Laundered - (reusable wipes that have not been used to clean up spills of HW)	Not a HW	
	Disposed	Must make a HW determination and manage accordingly	

Table 3: Generator Summary Chart

	<b>CESQG</b>	<b>SQ</b>	<b>LQG</b>
Quantity Limits	100 kg/month 1 kg/month of acute hazardous waste 100 kg/month of acute spill residue or soil §§261.5(a) and (e)	Between 100-1,000 kg/month §§262.34(d)	1000 kg/month or more >1 kg/month of acute hazardous waste >100 kg/month of acute spill residue or soil Part 262 and §261.5(e)
EPA ID Number 1	Not required §261.5	Required §262.12	Required §262.12
On-Site Accumulation Quantity	1,000 kg 1 kg acute 100 kg acute spill residue §§261.5(f)(2) and (g)(2)	<6000 kg §262.34(d)(1)	No Limit
Accumulation Time	None §261.5	180 days or 270 day (if >200 miles) §§262.34(d) and (e)	90 days §262.34(a)
Storage Requirements	Comply with §261.5 and prevent releases	Basic requirements with technical standards for tanks or containers §§262.34(d)(2) and (3)	Full compliance for management of tanks, containers or containment buildings §262.34(a)
Off-site Management	State approved or RCRA	RCRA permitted/interim status facility §262.20(b)	RCRA permitted/interim

of Waste	permitted/interim status facility §§261.5(f)(3) and (g)(3)		status facility §262.20(b)
Manifest	Not required §261.5	Required §262.20	Required §262.20
Biennial Report	Not required §261.5	Not required §262.44	Required §262.41
Personnel Training	Not required §261.5	Basic training required §262.34(d)(5)(iii)	Required §262.34(a)(4)

<sup>1</sup> \*Information concerning the procedure to be used for obtaining an EPA ID number can be found on IDEM's Web site at [www.in.gov/idem/5029.htm](http://www.in.gov/idem/5029.htm) or by calling IDEM at 317-232-7956 (toll free at 800-451-6027, press 0 and ask for ext. 2-7956).

	<b>CESQG</b>	<b>SQ</b>	<b>LQG</b>
Contingency Plan	Not required §261.5	Basic plan §262.34(d)(5)(i)	Full plan required §262.34(a)(4)
Emergency Procedures	Not required §261.5	Required §262.34(d)(5)(iv)	Required §262.34(a)(4)
DOT Transport Requirements	Yes (if required by DOT)	Yes §§262.30-262.33	Yes §§262.30-262.33

## POTENTIAL WASTE STREAMS

### *AEROSOL CONTAINERS*

Empty aerosol containers may be sent to a scrap metal recycler for recycling. Containers that are empty (see 40 CFR 261.7 for definition of "empty") are not considered to be a hazardous waste and may be disposed with a facility's regular trash. An aerosol container is considered to be empty when the pressure in the container approaches atmospheric pressure (i.e., nothing comes out of the can when the nozzle is not clogged and is pressed.) Note that a clogged can still contains materials, and, therefore is not considered to be empty. If a facility disposes of cans that are not empty, it must make a hazardous waste determination and manage the cans accordingly.

### **What Must be Done to be in Compliance?**

Listed below are the management responsibilities that a facility must follow for aerosol cans that contain or contained hazardous chemical(s).

- Ensure that aerosol cans are empty prior to sending them to a scrap metal recycler.
- Ensure that aerosol cans are totally empty prior to disposing of them.
- If the can no longer has a sufficient amount of propellant to force the product out,

puncture and drain the container. The product drained from the punctured container must be used for its intended purpose or characterized to determine if it is a hazardous waste. Be sure to use the product's MSDS sheet to in order to be familiarized with its hazards prior to puncturing and draining the container. Also ensure that appropriate personal protective equipment (e.g., safety glasses and gloves) is worn during this process.

- Make a hazardous waste determination on the container and the remaining product, and manage it accordingly.

## ***ANTIFREEZE***

Under Indiana's hazardous waste rules, ethylene glycol and propylene glycol (i.e., virgin antifreeze) are not listed hazardous wastes. However, contact with cooling system parts may cause used antifreeze to become contaminated with heavy metals, such as lead, chromium and cadmium. This contamination may make the antifreeze a hazardous waste. Similarly, used antifreeze that is mixed with other wastes (during storage, etc.) may result in a mixture that is a hazardous waste. Each facility is responsible for making a hazardous waste determination on its used antifreeze. This determination can be based on analytical test results of the used antifreeze, or it may be based on the knowledge of the waste and how it was generated and managed.

IDEM has reviewed data on used antifreeze (both ethylene glycol and propylene glycol-based) from a broad range of vehicle types and ages. The results of this data indicate that used antifreeze does not appear to exhibit the characteristics of a hazardous waste.

However, it is possible that a facility could generate used antifreeze that is a hazardous waste if the facility:

- Generates used antifreeze primarily from older vehicles (i.e., vehicles with metal radiators and lead soldered joints.)
- Generates a type of antifreeze other than traditional ethylene glycol or propylene glycol-based antifreeze.
- Mismanages its used antifreeze after it has been drained from the vehicle (i.e., if the antifreeze is mixed with hazardous wastes or other contaminants.)

More information on IDEM's regulatory analysis of used antifreeze may be obtained via IDEM's Web site, where a guidance document on "Classification of Used Antifreeze" is available: [www.in.gov/idem/files/la-017-gg.pdf](http://www.in.gov/idem/files/la-017-gg.pdf)

### **What Must be Done to be in Compliance?**

If facility used antifreeze is considered to be a hazardous waste, a facility must manage it according to the Hazardous Waste Rules. Listed below are the requirements for small quantity generators to properly handle used antifreeze (more requirements apply to large quantity generators):

If it is determined that a facility's used antifreeze to be a hazardous waste, it must:

- Label all containers in accordance with RCRA requirements. Remember to clearly mark

the words “HAZARDOUS WASTE” as well as the date the waste began to accumulate (or the date the container was completely filled if there is a satellite accumulation area onsite) on the used antifreeze container.

- Keep storage containers closed to prevent evaporation and spills.
- Conduct weekly inspections to ensure that the containers are in good condition. Look for leaks and for deterioration caused by corrosion or other factors. If a container leaks, put the hazardous waste or the leaking drum in another container.
- Keep monthly records of the amount of used antifreeze is accumulated
- Manifest drums of used antifreeze to a TSD facility
- Use only permitted waste transporters that have obtained an EPA identification number to transport drums of antifreeze off site.

Note that, even if a facility determines that its used antifreeze is not a hazardous waste, it must:

- Not put antifreeze into the environment (i.e. onto the ground or into streams).
- Never pour antifreeze into any drains if a facility is on city water, unless the local wastewater treatment plant has been contacted in order to make sure it can handle such a discharge
- Do not discharge antifreeze to a septic system.
- If a facility recycles antifreeze on-site, a hazardous waste determination must be made on the filters and sludge, or they can be treated them as hazardous wastes. Because the contaminants are concentrated in the filter and/or sludge, it is likely that these may be hazardous wastes.

## **Can Antifreeze be Recycled?**

Yes, however there are some things to keep in mind if it is decided to do so. They are as follows:

### ***Purchasing Recycling Equipment***

A facility may purchase antifreeze-recycling equipment to perform recycling on-site. The following two models of antifreeze recycling equipment are available:

**Closed-loop/on-vehicle model.** The Closed-loop/on-vehicle models are equipped with hoses that attach directly to the vehicle in order to flush the cooling system, recycle the antifreeze and replenish the cooling system. The advantage to this type of system is that the used antifreeze is contained during each step of the process, thereby reducing the possibility for improper handling and storage. Note that closed-loop systems may also be used to recycle antifreeze that will be stored for later use. The disadvantage of this type of system is that the antifreeze is typically recycled through filtration or deionization, which do not remove most dissolved contaminants.

**Batch system/off-vehicle model.** The second model is the batch system or off-vehicle model that requires that the service technician handle the antifreeze during each step of the process (i.e., drain the antifreeze, pour it into the recycling unit, and then replenish the vehicle.) These types

of systems may recycle the antifreeze by filtration or distillation. Distillation units remove suspended solids as well as dissolved contaminants.

### ***Contracting with a Service Company to Recycle Used Antifreeze***

Contracting this service to an outside company has certain advantages over purchasing recycling equipment. First, contracting this service does not require the initial capital expense of purchasing a recycling unit. Secondly, the filters and filter solids that are generated during the recycling process may be hazardous wastes. If recycling on-site, hazardous waste determination must be made and the waste must be managed accordingly. If this service contracted to an outside company that recycles used antifreeze off-site, that company will be responsible for the hazardous waste generated during the recycling process.

**On-site recycling.** Using an on-site mobile antifreeze recycling service involves having a recycling service visit the facility with a mobile coolant-recycling unit. Note that the facility will be responsible for any hazardous waste generated as a result of on-site antifreeze recycling. Spent filters and filter solids may potentially be hazardous wastes.

**Off-site recycling.** Another option is to send used antifreeze off-site for recycling with a reputable recycling company. Used antifreeze may be stored on-site for later pick-up. Recycling companies usually require a minimum pickup quantity of 50-55 gallons and, in addition to picking up used antifreeze, can also supply recycled antifreeze.

### ***Some Things to Keep in Mind about Antifreeze Recycling***

- Check vehicle manufacturers' warranties prior to using recycled antifreeze.
- Chemical additives must be added to the recycled antifreeze prior to its reuse in a vehicle. Recycling equipment vendors provide these additive packages.
- The use of recycling equipment will generate potentially hazardous wastes such as spent filters or filter solids.

## ***BATTERIES (LEAD - ACID)***

Indiana Statute requires that facilities recycle their used lead-acid batteries. If a facility sells batteries, a sign must be posted informing customers of the facility's legal obligation to accept used batteries for recycling. IDEM also requires that used batteries are properly stored.

### **What Must I do to be in Compliance?**

Listed below are the requirements pertaining to the sale and disposal of batteries as well as the requirements that must be followed to ensure that batteries are properly serviced, stored, and recycled.

**If a facility sells batteries.** It is required to post a sign in a location that can be seen by its customers. The sign must be at least 8.5" wide by 11" high and the lettering must be at least 18-point type. The written notice must indicate the following:

Recycle your used batteries.

Improper disposal of batteries is against the law.

It is illegal to put used motor vehicle batteries or other vehicle or boat batteries in the trash.

State law requires us to accept your used battery for recycling if you purchase a new battery from us.

**Battery management.** Ensure that used batteries are properly managed and recycled by doing the following:

- Properly store all spent lead-acid batteries in an area with secondary containment or in an area that provides a means to control and contain any battery acid spillage. If batteries are stored outdoors, the storage area must be curbed to contain leaks, and covered to prevent snow and rain from entering.
- Within 90 days from the date the spent lead-acid battery was received, the battery must be transferred:
  - back to the wholesaler;
  - to a facility that collects lead acid batteries for delivery to a recycling facility; or
  - to an IDEM-permitted secondary lead smelter (if sent to a secondary lead smelter in Indiana.)

**GOOD IDEA:** Storing batteries on a wire shelf with plastic spill trays placed below the shelf will allow easy inspection of all batteries for damage and to contain any leaking battery acid. By storing batteries in this manner, one can readily determine which battery is leaking and can properly neutralize the acid. Another way to store batteries would be to utilize an EPA-approved storage box.

## ***BRAKE AND CLUTCH REPAIR***

Normal wear on asbestos-containing brake and clutch pads causes the pads to release a friable dust, and may also cause the pads themselves to be friable. The term “friable asbestos” means a material that contains more than one percent (1%) asbestos that, when dry, can be crumbled or reduced to powder by hand pressure.

Brake cleaners and other products that are used when performing brake and clutch work may cause used brake pads, clutch pads, and/or wipes to become a hazardous waste. A hazardous waste determination must be made on used brake pads, clutch pads, and wipes. If any of these items are deemed to be a hazardous waste, they must manage them under the hazardous waste rules.

IDEM does not automatically require that all the dust and debris from brake and clutch work be managed as though it contains asbestos. A facility may use generator knowledge of the waste to determine whether or not it contains asbestos, or the waste may be tested to determine its asbestos content and then managed accordingly.

Asbestos-containing waste is regulated by IDEM as either a solid waste or a hazardous waste. Generally, asbestos-containing brake and clutch pads are considered to be a solid waste and can be disposed of with regular trash.

Brake cleaners and other products that are used when performing brake and clutch work may cause used brake pads, clutch pads, and/or wipes to become a hazardous waste. A hazardous waste determination must be made on used brake pads, clutch pads, and wipes. If any of these items are deemed to be a hazardous waste, they must manage them under the hazardous waste rules.

### **What Must be Done to be in Compliance?**

Listed below are the requirements that must be met when storing and disposing of asbestos-containing waste:

#### ***Storage:***

- Place bags of asbestos-containing waste in air-tight containers.
- Label the container with the following Danger label (note that the information may be handwritten on the container, or a facility may purchase pre-labeled bags designed for asbestos waste):

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD
--

- Store the container in an area that restricts access by unauthorized persons, such as a locked container, room, truck or trailer.

#### ***Disposal:***

- Make a waste determination (either solid or hazardous waste) and manage accordingly. A facility may dispose of the waste as a solid waste if it has made a waste determination and found that the waste is not a hazardous waste. If the material is considered to be a hazardous waste, it must be managed under the hazardous waste rules.
- Prior to shipping the asbestos-containing material as a solid waste, the container must be labeled with the following information:
  - the facility's name, address and telephone number



- if the quantity is less than one pound, use the DOT marking: “Asbestos, 9,NA2212, Class 9, PGIII”
  - if the quantity is one pound or more, use the DOT marking, “R.Q., Asbestos, 9, NA2212, Class 9, PGIII”
- Have asbestos-containing waste sent to a landfill that is approved by IDEM to accept solid waste.
- Provide the receiving landfill with sufficient notice prior to sending asbestos containing waste to them.
- Ensure that an Asbestos Waste Shipment/Disposal Record accompanies each load of asbestos-containing waste that is sent for disposal. A facility may obtain a copy of the IDEM guidance document entitled “Asbestos Handling and Disposal Requirements,” which includes the Asbestos Waste Shipment/Disposal Record form, via IDEM’s Web site at : [www.in.gov/idem/files/la-011-gg.pdf](http://www.in.gov/idem/files/la-011-gg.pdf)
- If a completed copy of the Asbestos Waste Shipment/Disposal Record is not received from the waste disposal facility within 35 days of acceptance of the waste by the transporter, a facility must contact the transporter and/or the waste disposal facility to determine the status of the asbestos-containing waste that was sent for disposal. If the transporter and/or the waste disposal facility do not respond to the inquiry within 10 days, a facility must file a written exception report with the Office of Air Quality's Asbestos Section. This report must include a copy of the shipment/disposal record, a letter explaining the actions taken to locate the shipment, and the results of these actions. For additional information on the proper handling and disposal of asbestos, visit IDEM’s Web site at: [www.in.gov/idem/files/la-011-gg.pdf](http://www.in.gov/idem/files/la-011-gg.pdf) or request the document entitled “Asbestos Handling and Disposal Requirements”.

### ***CATALYTIC CONVERTERS (and Emission Control Devices)***

Tampering with emission control devices (such as catalytic converters, exhaust gas recirculation valves, air pumps, etc.) is illegal unless the vehicle is used as a parts car.

#### **What Must be Done to be in Compliance?**

Listed below are the requirements that must be followed when managing or removing catalytic converters:

- Do not tamper with catalytic converters or any part of the vehicle’s emissions control equipment unless the vehicle is used as a parts car. Tampering includes activities such as:
  - removing or making the control emissions inoperable.
  - adjusting control emissions so that they no longer meet the manufacturer’s specification.

- installing a replacement part that is not specified for use in the vehicle or is not equally effective in reducing emissions as the specified replacement part.
- adding a part that was not originally certified on the car.
- Do not rent, lease, sell, or transfer a vehicle that has been subject to tampering unless the vehicle is to be used as a parts car.
- Do not operate a vehicle with knowledge that the vehicle has been subject to tampering.
- If catalytic converters are dismantled at the facility, it must ensure that there is no release of waste onto the soil during removal and dismantling activities.
- If a facility repairs vehicles (rather than parting them out), refer to IDEM's Compliance Manual for Indiana's Vehicle Maintenance Shops for the regulations a facility must follow. This manual is available on the web at: [www.in.gov/idem/files/ctap\\_vehicle\\_shop\\_manual.pdf](http://www.in.gov/idem/files/ctap_vehicle_shop_manual.pdf)

**GOOD IDEA:** Send old catalytic converters to scrap metal recycling companies. Catalytic converters contain precious metals such as platinum, palladium, and rhodium

### ***FLUORESCENT LIGHT TUBES AND HIGH INTENSITY DISCHARGE (HID) LAMPS (does not include halogen lamps)***

Historically, fluorescent tubes and lamps contained a sufficient amount of mercury to make them a hazardous waste when disposed. Some new tubes and lamps are now marketed as containing a reduced amount of mercury, presumably making them a nonhazardous waste when disposed. However, it remains the generator's responsibility to ensure the correct hazardous waste determination is made and to manage the waste accordingly. If a facility is considering purchasing a new type of tube/lamp that is marketed as a non-hazardous waste when disposed, it should request the analytical test results for the product (i.e., toxic characteristic leaching procedure, otherwise referred to as TCLP) from the vendor. Ask the vendor to explain the TCLP results, or contact IDEM's Office of Land Quality, (317)234-6951 for assistance. If the used tubes/lamps are considered to be a hazardous waste, there are two management options for handling waste tubes and lamps:

- 1.) Dispose of them under the hazardous waste rules,
- 2.) Recycle or dispose of them under the Universal Waste Rule.

**The Universal Waste Rule.** This rule consists of tailored management standards for certain types of hazardous waste, and is designed to reduce regulatory requirements by promoting environmentally-sound recycling and disposal practices. The universal waste rules are easier for businesses to comply with. For more information on Universal Wastes, refer to IDEM's Web site

guidance document entitled, “Universal Waste Rule”. This document is available on IDEM’s Web site at: [www.in.gov/idem/files/universalwasterule.pdf](http://www.in.gov/idem/files/universalwasterule.pdf)

Note that, a bonus of the universal waste rule is that discarded tubes and lamps are not counted in determining generator status. A list of fluorescent tube recyclers is contained in the Vendor Directory.

**The Hazardous Waste Rules.** The second option is to manage used tubes and lamps under the hazardous waste rules. See the earlier discussion entitled “Complying with Hazardous Waste Management Rules” for more information.

### **What Must be Done to be in Compliance?**

Listed below are the rules that must be followed depending upon how a facility manages its used tubes and lamps.

- If a facility follows the universal waste rule it must:
  - educate employees on proper handling and emergency procedures associated with the waste tubes/lamps.
  - contain all releases of waste and residues.
  - make a hazardous waste determination on used tubes and lamps and manage them accordingly.
  - if used tubes and lamps are managed under the Universal Waste Rule, a facility must:
    - package both unbroken and broken tubes/lamps to prevent breakage and a release of contaminants; lamps managed under the Universal Waste Rule may not be intentionally crushed or broken.
    - label the tubes/lamps or the containers holding them with the words “Universal Waste lamps” or “Waste Lamps” or “Used Lamps” or any other words that accurately identify the universal waste lamps.
    - have used tubes and lamps transported to a universal waste collection center or directly to their final destination. A list of fluorescent tube and high intensity discharge lamps recyclers can be found at: [www.in.gov/idem/files/mercury\\_recyclers.doc](http://www.in.gov/idem/files/mercury_recyclers.doc). Note that under the Universal Waste Rule, it is not required to manifest used tubes/lamps.
    - not accumulate and store used tubes/lamps for longer than a one-year period.
- If used tubes and lamps are not managed as a universal waste, then the hazardous waste rules must be followed.
- If the used tubes and lamps are not hazardous waste than solid waste rules must be followed.
- In all cases IDEM encourages recycling rather than disposal. Even tubes and lamps that do not have enough mercury in them to be regulated as a hazardous waste have some mercury in them.

## ***FUEL & FUEL FILTERS***

Gasoline, diesel fuel and fuel filters that are contaminated with gasoline or diesel may be subject to IDEM requirements.

### **What Must be Done to be in Compliance?**

Listed below are the management responsibilities that must be followed when managing fuel and fuel filters:

- Manage waste fuel in one of the following manners:
  - reuse the fuel if it is not contaminated.
  - send to a re-refiner or fuel blender.
  - make a hazardous waste determination and manage accordingly.
- Make a hazardous waste determination on fuel filters that contain gasoline, or drain the residual fuel from the filter collecting any liquid for reclamation or reuse.

## ***MERCURY SWITCHES***

A significant number of motor vehicles manufactured before 2003 contain mercury switches. When these vehicles reach the end of their useful lives, they are shredded and sold as scrap steel. When these scrap vehicles are sent to a crusher, shredder or steel smelter for recycling, the mercury in these switches is released into the land, water and air. Because this mercury is difficult and expensive to remove at the shredder and the steel mill, Indiana has developed a program to remove these mercury switches before the vehicles are shredded.

Motor vehicle manufacturers who produced vehicles with mercury switches have formed End of Life Vehicle Solutions (ELVS), a corporation whose purpose is to run a nationwide program to remove these mercury switches. ELVS has developed a Mercury Minimization Plan to remove mercury switches. ELVS is responsible for providing motor vehicle recyclers with educational materials, containers for storing and shipping switches, recycling services at mercury retorters, and tracking of recycled switches. The educational materials provided by ELVS will show you which vehicles have mercury switches, where they are located, and how to safely remove, store and ship them to the mercury recycler.

Motor vehicle recyclers include automobile salvage recyclers, automobile scrap yards, hulk crushers, scrap metal processors, and vehicle disposal facilities.

If you are a motor vehicle recycler, Indiana law requires you to remove all mercury switches from each end of life vehicle when you receive the vehicle (IC 13-20-17.7-5).

Under Indiana law, you must follow the ELVS Mercury Minimization Plan to remove and recycle the switches. This includes obtaining a container and educational materials from ELVS, properly removing the mercury switches when you receive the vehicle, storing the mercury switches in the container provided, and shipping the switches to the mercury recycler in the

container provided. When you use the supplied container as described in the ELVS instructions, you will comply with Indiana rules for storing and shipping mercury switches.

The mercury recycler counts the switches received and sends that information to ELVS. ELVS is responsible for ensuring that switches are properly recycled and for tracking all recycled mercury switches.

If you are a motor vehicle recycler in Indiana, you should have already received a container and educational materials from ELVS. If you have not received your container and educational materials, contact The Environmental Quality Company, the ELVS contractor, at (734) 547-2511 to obtain them.

IDEM will pay you a bounty for each mercury switch removed. The bounty is \$3.00 for each mercury convenience switch and \$5.00 for each ABS G-force sensor. When you ship a container of mercury switches for recycling, you may send a claim for payment to IDEM. We will verify the number of switches claimed with ELVS and will send your payment as soon as possible. To receive payment for these mercury switches, you must follow the ELVS Mercury Minimization Plan.

If you have questions about these payments or Indiana's mercury switch removal program, please contact IDEM's Office of Pollution Prevention and Technical Assistance at (800) 988-7901.

### ***OIL (USED)***

Includes any petroleum-based or synthetic oil that has been used, such as engine oil, filter solids from used oil tanks, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, etc.

Two environmental management options currently exist for auto salvage facilities that generate used oil.

The first option is to recycle used oil or burn it for energy recovery under the Used Oil Rule. The second option is to dispose of used oil, following all applicable solid and hazardous waste rules. By managing used oil under the Used Oil Rule (rather than under the solid and hazardous waste rules), the regulatory requirements will be lessened.

#### **Option 1: Used Oil Rule (Recycling or Burning for Energy Recovery):**

Complying with the Used Oil Rule means that a facility does not have to manage used oil or the sludge from used oil tank as a hazardous waste. In order to comply with the Used Oil Rule, a facility must properly manage its used oil (i.e., don't mix anything other than waste fuels with used oil), and must either recycle used oil or burn it for energy recovery. Keep in mind that oil that is intentionally or accidentally mixed with a hazardous waste must be managed as a hazardous waste.

Note that, under the Used Oil Rule, both re-refining and burning of used oil for energy recovery are considered to be forms of recycling. Re-refining is the preferred method of managing used oil because it preserves our limited resources. However, in some instances, such as when a facility is disposing of settled solids from the bottom of used oil tank, or disposing of petroleum-contaminated wipes, sorbents, or spill materials, burning the material for energy recovery is the better management option.

If a facility chooses to burn used oil in a used oil furnace, be aware that there are additional rules that must be followed under the Used Oil Rule. Because small oil burning furnaces are not as clean burning or as efficient as industrial furnaces, IDEM recommends that used oil be sent to a fuel blender rather than burning it on-site.

## **Option 2: Solid and Hazardous Waste Rules (Disposal):**

Used oil that cannot be managed under the Used Oil Rule (i.e., because of contamination with a hazardous waste or other material) is subject to all applicable solid and hazardous waste rules. Under the solid and hazardous waste rules, a facility must make a hazardous waste determination and manage used oil accordingly.

If a facility determines that its used oil is not a hazardous waste, it is still prohibited from being sent to a solid waste landfill because these landfills do not accept liquid waste or waste that contains free liquids (i.e., wastes containing liquids that will readily pour.)

Therefore, used oil must be sent to a facility that is capable of handling liquid waste or that can solidify the waste prior to disposal.

## **What Must be Done to be in Compliance?**

Managing used oil may be done in a number of different ways. Listed below are the various options as well as the requirements for each.

- If the Used Oil Rule is being followed, a facility must:
  - Recycle used oil or burn it for energy recovery in an authorized device.
  - Not mix used oil with hazardous wastes.
  - Determine the halogen content of the used oil by using generator knowledge or by using a test kit for halogens (available from safety supply dealers.) If the used oil contains more than 1,000 parts per million total halogens, it is presumed to have been mixed with a hazardous waste and must be treated as a hazardous waste unless a facility can demonstrate that the source of the halogens was not from mixing a hazardous waste with used oil. To avoid having to manage used oil as a hazardous waste, do not add solvents or anything else to the used oil.
  - For off-site shipments, a facility must ensure that the transporter used has an EPA identification number. A facility may personally transport less than 55 gallons of its own used oil (or oil that has

been collected through a household do-it-yourself collection program such as that described below) at any time to a used oil collection center or, to a facility's own aggregation point without obtaining an EPA ID number. Note that an aggregation point is basically a collection center designed to accept small amounts of used oil and store it until enough is collected to ship it elsewhere for recycling. Aggregation points collect oil only from facilities run by the same owner/operator and from individuals.

- If a facility following the Used Oil Rule and Burning Used Oil On-Site, it must:
  - Follow all of the above-listed requirements.
  - Have a used oil-fired space heater with a maximum capacity of not more than 500,000 Btu/hr.
  - Vent combustion gases from the heater to the ambient air
  - Burn only used oil that a facility generates or used oil received from households that bring their used oil to the facility.
- If a facility is following the Solid and Hazardous Waste Rules, it must:
  - Determine if used oil is a hazardous waste. If the oil is considered to be a hazardous waste, it must be managed according to the hazardous waste rules. If used oil is not a hazardous waste, it still must be managed under IDEM's solid waste rules and sent to a facility that is permitted to accept this type of waste.

Regardless of whether a facility following the Used Oil Rule or the Solid & Hazardous Waste Rules, it must do the following:

- Clean up spills promptly.
- Keep oil storage containers in good condition. Drums used to store oil cannot be rusting or leaking.
- Develop a Spill Prevention, Control and Countermeasures Plan if a facility stores has an accumulative storage capacity in excess of 1,320 gallons.
- Report oil spills (see chapter on spill reporting for additional information.)
- Not apply used oil as a dust suppressant.
- Not store used oil in surface impoundments (i.e., lagoons.)

A number of guidance documents concerning used oil are available via IDEM's Web site. They are:

- "Complying with Indiana's Used Oil Rule" ([www.in.gov/idem/5042.htm](http://www.in.gov/idem/5042.htm))
- "Used Oil Filters" ([www.in.gov/idem/files/usedoilfilters.pdf](http://www.in.gov/idem/files/usedoilfilters.pdf))

### ***Biennial Used Oil Management Report.***

Indiana waste rule 329 IAC 13-7-8 requires used oil processors or re-refiners to submit a report every other year which describes their used oil activities for the preceding year.

This report is due on March 1 of every even numbered year for the activities conducted during the previous odd numbered year. Access the reporting form here:

[www.in.gov/idem/5036.htm](http://www.in.gov/idem/5036.htm)

**GOOD IDEA: Starting a Do-It-Yourself (DIY) Oil Collection Program**

The United States EPA estimates that millions of gallons of used oil are released into the environment each year by household do-it-yourselfers. By participating in a do-it-yourself (DIY) oil collection program, a facility can help prevent oil waste from polluting the environment and can also demonstrate a facility's commitment to customer service and community.

Prior to starting a DIY collection program, a facility must contact the Plan Review Division of Fire & Building Safety within the Indiana Department of Homeland Security to ensure that it is following applicable regulations. A facility must also follow the management standards of IDEM's Used Oil Rule, accept DIY used oil, and send the DIY oil to a recycler or burn it for energy recovery.

Many used oil transporters will pick up used oil, including used oil that is collected from DIY, at no charge if a minimum of 200 gallons of used oil is present per pick-up.

Some used oil transporters will also provide a double-walled oil storage tank and will train staff in the proper collection of DIY used oil. Contact a used oil transporter to request additional information about participating in a DIY oil collection program.

Some suggestions for implementing a used oil-recycling program include:

- Offer special reusable containers to do-it-yourselfers. Avoid accepting other used oil containers.
- Use a separate drum or tank for do-it-yourselfer oil to avoid potential contamination of own used oil.
- Visually inspect used oil brought in by do-it-yourselfers. Do not accept suspicious materials.
- Have the do-it-yourselfers sign a log with a statement verifying the material is used oil only.
- Post a sign and provide written materials describing the program.
- Include this public service and any other environmental efforts in the advertisements.

***OIL FILTERS (Used)***

When a used oil filter is removed from a vehicle, approximately one pint of oil may remain trapped in the filter. The used oil and sludge that remain in the filter may contain contaminants such as heavy metals that are picked up as the oil circulates through the engine. High concentrations of heavy metals may cause used filters to demonstrate hazardous waste



characteristics, making the filters subject to hazardous waste regulations if the filters are not properly drained. (See the earlier chapter, “Complying with the Hazardous Waste Rules”, for additional information about hazardous waste characteristics). There are several management options for handling used oil filters. The regulations must be followed depending on whether a facility properly drains its used filters and what is subsequently done with them (e.g., recycle, burn, discard.)

Properly hot drained filters are exempt from Indiana's hazardous waste regulations and may be disposed as solid waste. The term “hot drain” means to immediately drain the filter after it is removed from a vehicle that is at or near the engine's operating temperature, while employing some additional means to facilitate draining such as puncturing, crushing, or dismantling.

Undrained filters may be managed under Indiana’s Used Oil Rule if the filters are recycled or burned for energy recovery. (See “Oil-Used” within this chapter for additional information on Indiana’s Used Oil Rule).

Undrained filters that are discarded are subject to all applicable solid and hazardous waste rules. Note that, even if a facility’s used oil filters are not considered to be a hazardous waste, they still cannot be sent to a landfill because of the restrictions on wastes containing free liquids (liquids that will readily pour). Instead, the filters must be managed under IDEM’s solid waste rules and sent to a facility that is capable of handling liquid waste or that can solidify the waste prior to disposal.

Large filters, such as those used in heavy-duty vehicles, are likely to be terne-plated. Terne is an alloy of tin and lead, and is used to strengthen the shells of larger oil filters.

Non-terne plated filters that are properly hot drained prior to disposal are exempt from the hazardous waste rules. Terne-plated filters do not share the same exemption from the hazardous waste rules when disposed. Terne-plated filters are exempt from hazardous waste rules only if they are recycled as a scrap metal. If they are disposed of, they are subject to a hazardous waste determination and, if found hazardous, must be managed in accordance with all applicable hazardous waste requirements.

Regulations for Regular (Non-Terne Plated) Used Oil Filters

<b>Management Option</b>	<b>Applicable Regulation</b>
Properly Hot Drained	Exempt from Hazardous Waste Regulations
Recycled	Used Oil Rule
Burned for Energy Recovery	Used Oil Rule
Discarded	Solid & Hazardous Waste Rules

## What Must be Done to be in Compliance?

As stated above, managing used oil filters may be done in a number of different ways.

Listed below are the regulations that a facility must follow depending on the option that is used.

If a facility chooses to hot drain its used oil filters, it must:

- puncture the filter anti-drain back valve or the filter dome end and hot drain the filters.; or
- perform any other equivalent hot draining method that will remove the used oil so that the filters contain no free liquids. Equivalent methods include crushing or dismantling the filters;

and it must properly manage the oil drained from the filters (see the previous “Oil–Used” chapter for more information).

If a facility does not hot drain filters, it must recycle them in accordance with the Used Oil Rule or if disposed determine if the filters demonstrate hazardous waste characteristics. In summary:

- If a facility plans to recycle undrained filters follow the Used Oil Rules, see the “Oil – Used” chapter.
- Filters that demonstrate hazardous waste characteristics are considered to be a hazardous waste when disposed and must be managed accordingly. Manage terne-plated filters as a hazardous waste, unless they are properly hot drained and recycled.

**Note:** All properly drained filters recycled as scrap metal are exempt from hazardous waste regulations.

**GOOD IDEA:** Crushing used oil filters is the most effective way to remove any remaining oil. Crushing also allows more filters into each drum, and since many service companies charge by the drum (rather the weight of the drum or number of filters in the drum), the facility can reduce the transportation and/or disposal costs associated with used oil filters. A facility may either purchase equipment to crush the filters, or it may send the filters to a service company to have them crushed and then sent to a recycler.

## ***REFRIGERANTS/MOTOR VEHICLE AIR - CONDITIONING SERVICE***

Motor vehicle air-conditioning systems (MVAC) have historically used the refrigerant CFC-12, also known as Freon or R-12. R-12 is a chlorofluorocarbon (CFC) that has been identified as causing damage to the ozone layer, which protects the earth from harmful ultraviolet radiation. A new refrigerant called HFC-134a, also known as R-134a, is being used in all new vehicles. R-134a is a hydrofluorocarbon (HFC) which is less harmful to the stratospheric ozone layer.

Refrigerant blends are a mixture of several chemicals and are designed to emulate the characteristics of R-12. All EPA accepted blends, such as R 22, R 142b and R 124, contain ozone depleting hydrochlorofluorocarbons (HCFC).

When refrigerant blends are mixed with R-134a or R-12, the resulting mixtures cannot be recycled. Similarly, whenever R-12 is contaminated with another refrigerant, not only can the mixture not be recycled; it must be managed as a hazardous waste. Because blends should not be mixed with R-134a or R-12, a separate recovery machine is needed specifically for blends. Another problem with blends is that identifying and recovering blend refrigerants is more difficult than working with straight R-12 or R-134a. Refrigerants in customers' MVAC systems should be tested prior to removal (use a refrigerant diagnostic tool) to determine if the system contains a specific blend or a "mystery" mixture of refrigerants. Recovery machines should be checked to ensure they can be used to recover the specific type refrigerant that will be recovered. Recovering incompatible refrigerants into a recovery machine could cause damage to the machine.

The 1990 Clean Air Act Amendments required the phase out of CFC-based refrigerants used in MVAC systems, and stopped the production and importation of CFCs in 1995.

The U.S. EPA regulates MVAC refrigerants and requires that they be either recycled onsite or sent to an EPA certified reclaimer. Facilities that remove refrigerants from MVACs must use EPA-approved recovery or recovery/recycling equipment and must have their technicians trained by an EPA-accredited training program. As mentioned previously, IDEM regulates contaminated R-12 refrigerant mixtures as a hazardous waste.

### **What Must be Done to be in Compliance?**

The facility manager or owner can ensure the facility's compliance with EPA regulations by adhering to the following requirements.

- Never intentionally vent refrigerants to the atmosphere.
- Recover all refrigerants used in MVAC systems prior to beginning work on the system.
- Have all MVAC technicians trained and certified by an EPA-accredited training program in the proper use of refrigerant recovery/recycling equipment.
- Use only EPA-approved recovery or recovery/recycling equipment to handle refrigerants.
- Submit an MVAC equipment owner certification form to the EPA prior to commencing MVAC service operations (only one certification is required regardless of the number of units that the facility has.)
- Either recycle R-12 on-site or sell/give recovered R-12 to an EPA-certified refrigerant reclaimer. If the R-12 is sent to a reclaimer, the facility must retain the name and address of the reclaimer.
- Maintain the following records and certification forms on-site:
  - EPA equipment owner certification forms for at least one of piece of recovery or recovery/recycling machines;
  - certification forms for each trained technician and facility operator;
- Do not top-off a leaking MVAC system with a refrigerant other than what is currently present in the system.
- Extract the old refrigerant from an MVAC system prior to charging the system with a new type of refrigerant.
- Handle R-12 that has been mixed with other refrigerants as a hazardous waste.
- Properly manage compressor oil recovered from MVAC systems.

#### Blends:

- Use only EPA-approved recovery equipment, and dedicate this equipment specifically to blends and “mystery” mixtures.
- Recover refrigerants with new or used equipment and manage it in one of the following manners:
  - A facility may dedicate a piece of older equipment (i.e., that was formerly used to recover uncontaminated CFC-12 or HFC-134a) to recover blends as well as contaminated CFC-12 or HFC-134a. However, once a facility chooses to dedicate this equipment to recovering blends and contaminated mixtures, it may no longer use this equipment to recover uncontaminated CFC-12 or HFC-134a. Additionally, a facility must ship the refrigerants recovered from this equipment to a reclaimer or off-site for destruction (not allowed to be recycled on-site.)
  - A facility may recover a blend refrigerant using a new piece of EPA approved equipment designed to recover, but not recycle, any single, specific blend refrigerant.

**GOOD IDEA:** A facility may obtain a variety of information, including the EPA equipment certification form, a listing of organizations with EPA-accredited training programs, and EPA-approved third party refrigerant reclaimers by calling the Stratospheric Ozone Hotline at (800) 296-1996.

A facility may also obtain information from EPA's auto air conditioning World Wide Web site at <http://www.epa.gov/ozone/title6/609>

### ***SOLVENT “BASICS”***

The regulations a facility must follow when managing and disposing of solvents depends on the type(s) of solvent and pre-cleaner(s) it is using. Listed below are the types of solvents potentially used by auto salvage facilities and an overview of the regulations associated with each. Refer to the sections that follow this introduction, Petroleum-Based Solvents and Aqueous-Based Solvents, for more information on each type of solvent.

#### **Aqueous (water) Based Solvents**

Aqueous-based solvents are generally less toxic alternatives to petroleum-based solvents. Unlike petroleum-based solvents, there are generally no hazards or adverse impacts associated with the detergent and water solution found in aqueous-based solvents. The detergent used for aqueous parts washing may be an acid, alkaline or a citrus-based solution. Some aqueous systems use microbes to eat the oil and grease that accumulate in the cleaning system.

Aqueous parts washers may be in the form of a heated parts washing sink, an immersion tank, or a high-temperature spray cabinet. A high-temperature spray cabinet is similar to a large dishwasher in that it combines heat, soap and spraying action to clean dirty parts. This type of unit is available in various sizes, with the larger units having ample capacity for cleaning large parts.

If a facility is considering switching to an aqueous-based cleaner, be aware that some aqueous cleaners will cause the parts to rust, requiring that the parts be treated after they are cleaned.

Also be aware that used aqueous-based solvents may be a toxic hazardous waste if they are contaminated to the extent that they exhibit hazardous waste characteristics or are contaminated with a listed hazardous waste. Potential contaminants include oil and grease, lead, chromium, cadmium, and any precleaners used by the facility.

### **Petroleum-Based Solvents (mineral spirits).**

New/virgin petroleum-based solvents are classified according to their flash point. The term “flash point” refers to the temperature at which a material could ignite if exposed to a spark. Materials with a low flash point (100-140° F) will ignite more easily than materials with a higher flash point (140-200° F.)

#### ***Low-Flash Solvents (100-140° F)***

Petroleum-based solvents with a flash point from 100-140° F are also referred to as “low flash solvents.” This type of solvent will be an ignitable hazardous waste and, possibly, a toxic hazardous waste when disposed.

#### ***High-Flash Solvents (140-200° F)***

Petroleum-based solvents with a flash point from 140-200° F are also referred to as “high-flash solvents.” Used high-flash solvent is not considered to be an ignitable hazardous waste unless it is contaminated and its flash point drops below 140° F.

Be aware that many high-flash solvents have a flash point that is only slightly above the 140° F threshold for this group of solvents. If the facility uses pre-cleaners that contain flammable materials, the used high-flash solvent may become a low-flash solvent (i.e., an ignitable hazardous waste) that is subject to more stringent regulations. In addition to potentially being an ignitable hazardous waste, a used high-flash solvent may also be a toxic hazardous waste if contaminated to the extent that it exhibits hazardous waste characteristics. Waste solvents generated from the use of pre-cleaners that are listed wastes should be kept segregated from other solvents. If listed waste solvents are mixed with otherwise non-hazardous solvents, the entire mixture becomes a hazardous waste.

### **Chlorinated solvents**

Using chlorinated solvents can lead to significant compliance work for a facility. Chlorinated solvents include the following:

- chlorobenzene (monochlorobenzene or benzene chloride)
- trichloroethylene (trichloroethane, ethinyl trichloride)

- chlorinated fluorocarbons
- methylene chloride (dichloromethane, methylene dichloride, methylene bichloride)
- tetrachloroethylene (perchloroethylene, ethylene tetrachloride)
- 1,1,1-trichloroethane (methyl chloroform, chloroethene)

Check the product label or the MSDS sheets for these chemicals. If a facility is using any of them, IDEM air regulations will apply. Hazardous waste regulations may also apply.

## ***AQUEOUS-BASED SOLVENTS***

Depending upon the type and level of contamination, a facility's used solvent may be unacceptable for discharge to the local Publicly Owned Treatment Works (POTW) or may be a hazardous waste. Note that, if a facility wishes to discharge its aqueous cleaning solution, the facility's drain should be connected to a POTW. For information on discharging used solvent to a (POTW), see the chapter titled, "Notifications and Permitting". For information on making a hazardous waste determination and managing hazardous waste, see the earlier chapter titled, "Comply with the Hazardous Waste Rules".

### **What Must be Done to be in Compliance?**

Listed below are the requirements that a facility must follow when managing and disposing of aqueous-based solvents.

- Make a hazardous waste determination and manage used aqueous solution accordingly. For additional information on listed and characteristic hazardous wastes and the method to be used for making a waste determination, refer to the chapter entitled, "Complying with the Hazardous Waste Rules."
- Do not discharge used aqueous solution unless it is connected to a POTW or a holding tank or unless the facility has a National Pollutant Discharge Elimination System (NPDES) permit, see the chapter titled, "Notifications and Permitting" for information on NPDES permits. If a facility is discharging to a POTW, the facility must ensure that the discharge meets the effluent limits set by the POTW. See the Wastewater section for more information.

**GOOD IDEA:** Purchasing an aqueous parts washer with a skimmer and a timer will provide the facility with several benefits. First, the timer will allow it to automatically turn the washer's heater unit on and off at certain times each day. Turning the heat off at the end of each day not only saves energy, but also allows the aqueous solvent to cool and the oil and grease to separate. The timer can then schedule the skimmer to remove the oil and grease that has risen to the top of the solvent. Frequent skimming of these contaminants will keep the solvent at its peak operating efficiency. Finally, the timer can be set to automatically turn the heater unit back on so that the solvent is ready to use at the beginning of each work day.

## ***PETROLEUM-BASED SOLVENTS***

Some facilities use supplemental cleaning products to pretreat carbon deposits or clean heavily soiled parts. These cleaning products typically contain ignitable and/or chlorinated solvents such as methanol, propane, xylene, methylene chloride, trichloroethane and/or tetrachloroethylene. The use of these products may cause used solvent to be a hazardous waste due to toxicity as well as ignitability.

In addition to precleaners, used solvent may be contaminated with lead and/or chromium, which are frequently used as coatings on metal parts. A thin layer of these coatings may wash off when the parts are cleaned, leaving heavy metals in the used solvent.

Under IDEM's air regulations, all facilities that use petroleum-based solvents in an immersion cleaning machine (solvent sink) or in a remote reservoir cleaning machine (part sprayer), must follow specific work practices to limit the amount of volatile organic compounds (VOCs) entering the air. These work practices are listed in the "What Must I Do To Be In Compliance" section below.

Under IDEM's hazardous waste rules, used petroleum-based solvent with a flash point below 140° F is a hazardous waste due to the characteristic of ignitability. The term "flash point" refers to the temperature at which a material could ignite if exposed to a spark. Used petroleum-based solvents with a flash point above 140° F are not regulated as a hazardous waste due to ignitability, but may be a hazardous waste due to toxicity depending upon the level and type of contamination.

Note that, if a facility is classified as a conditionally-exempt small quantity generator (CESQG), disposing of more than 30 gallons of hazardous waste in any one calendar month will change a facility's hazardous waste generator status classification from CESQG to small quantity generator (SQG). If a facility's used petroleum-based solvent is determined to be a hazardous waste, it may easily move into the SQG classification when the parts washer is changed out. Parts washers typically contain between 19 and 27 gallons of used solvent, making the amount of hazardous waste very near the 220 pounds per month threshold for SQG's.

For additional information on hazardous waste characteristics and generator categories, refer to the chapter titled, "Complying with the Hazardous Waste Rules."

## **What Must be Done to be in Compliance?**

Listed below are the requirements that must be followed when managing and disposing of petroleum-based solvents.

- If a facility uses petroleum-based solvents in immersion cleaning machines (solvent sinks) or in a remote reservoir cleaning machine (part sprayer), it must:
  - keep the solvent tank covered when not in use to prevent evaporation.
  - place a drain shelf in the basin of the parts washer. This shelf allows solvent to drain back into the solvent tank.
  - drain all parts for at least fifteen (15) seconds or until the part is no longer dripping.

- store used solvent to be disposed in tightly covered or closed containers.
- Users of solvents with a vapor pressure at or below two millimeters of mercury (2.0 mm Hg) must also keep a record of each purchase, including the following information:
  - name and address of the solvent supplier
  - date of purchase, the type of solvent
  - volume of each unit
  - total volume of the solvent, and
  - vapor pressure of the solvent
- Make a hazardous waste determination on used petroleum-based solvent and manage it accordingly.

#### **GOOD IDEA: Purchasing or Leasing a Solvent Sink With a Filter Unit**

Some of the newer solvent sinks have filter units that extend the life of the solvent by filtering out contaminants. Dirty solvent passes through the filtering unit where contaminants are removed, and clean solvent is returned to the reservoir for reuse.

The type and location of the filters on the solvent sink vary depending upon the type of filtration system used. Some of the more commonly employed filtration systems are:

- side-mounted disposable fabric filter units, which remove primarily particulate;
- cyclonic filter units that use centrifugal force “cyclonic action” to remove solids.

The solvent passes through a filtering unit where a spinning action takes place, causing the solids to settle out and allowing the clean solvent to be reused.

- clay-containing filter units that are placed in the solvent reservoir or in the wash basin to remove primarily oil and grease.

*Remember that a hazardous waste determination must be performed on the used filters prior to disposal.*

#### ***SORBENTS (includes spill clean-up materials and waste)***

A facility’s used sorbents and spill waste must be managed in one of the ways listed below. The particular requirement that must be followed depends on the type and extent of contamination, the quantity of contaminated sorbents generated per month, and whether the sorbents are recycled or disposed.



Note that the term “spill waste” includes sorbents as well as any contaminated soil, residue, debris, and articles from the cleanup of a spill or release of petroleum contaminated materials. The term “petroleum-contaminated materials” includes spill waste that contains virgin or used petroleum such as: gasoline, diesel fuel, hydraulic fuel, crude or refined oils that do not contain polychlorinated biphenyls (PCBs), kerosene, and heating oils.

- Recycling Petroleum-Contaminated Sorbents (and/or Spill Waste) under the Used Oil Rule. If a facility’s sorbents are contaminated with used oil or with a mixture of oil and other fuels, the sorbents may be burned for energy recovery under the Used Oil Rule. In order to comply with the Used Oil Rule, a facility must properly manage its oil-contaminated sorbents (i.e., don’t mix other wastes with these sorbents), and it must either recycle sorbents or burn them for energy recovery in an approved apparatus. See Oil-Used in this section for additional information on the Used Oil rule.
- Disposing of Contaminated Sorbents (and/or Spill Waste). If a facility cannot manage its sorbents and spill waste under the Used Oil Rule (e.g., because of contamination with a waste other than used oil or fuels), it must make a hazardous waste determination and manage them accordingly. Sorbents that exhibit hazardous waste characteristics or are contaminated with a listed hazardous waste must be managed as a hazardous waste. Refer to the chapter entitled, “Complying with the Hazardous Waste Rules” for additional information on characteristic and listed hazardous wastes.
- Disposing of Sorbents and/or Spill Waste as a Solid Waste (i.e., with regular trash). If used sorbents are not determined to be a hazardous waste, and they do not drip or accumulate free liquids (such as in the bottom of their storage container), a facility may dispose of them with its regular trash. Note that materials containing free liquids are prohibited from landfills.

## What Must be Done to be in Compliance?

Listed below are the requirements that must be followed when managing and disposing of sorbents.

- If a facility manages its petroleum-contaminated sorbents and spill waste under the Used Oil Rule, it must follow the requirements of this rule.
- If a facility cannot manage its used sorbents and/or spill waste under the Used Oil Rule due to contamination with a waste other than used oil or fuels, it must make a hazardous waste determination on its used sorbents. If they are a hazardous waste, the facility must manage them accordingly.
- If a facility’s used sorbents or spill waste are not a hazardous waste, it must ensure that the material does not drip, contain free liquids, or result in the accumulation of free liquids (such as in the bottom of their storage container) prior to disposing of them with the regular trash.

**Remember:** regardless of how a facility manages its contaminated sorbents and/or spill waste, it must not air dry contaminated sorbents to remove ignitable or toxic characteristics prior to disposal!

### **GOOD IDEA: Purchasing Biomass Derived Sorbent Material**

Sorbents made from plant cellulose, such as cotton and wood fibers, are very effective in absorbing liquids. Biomass-derived sorbents have an absorbency ratio of 4:1 when compared to most alternatives. The absorbency ratio is five times greater than clay.

## **WASTE TIRES**

When improperly managed, tires accumulate rainwater, becoming a breeding ground for mosquitoes that can spread disease. A second concern with tires stored in piles is that they represent a serious fire hazard potentially producing toxic smoke and intense heat. In addition, further environmental impact can occur if water applied to tire fires enters the ground and surface water via contaminated run-off.

### **What Must be Done to be in Compliance?**

A facility that is the source of more than 12 waste tires a year must keep a record on how the person disposes of waste tires. Most companies comply with this requirement by filing copies of the waste tire manifest forms provided by their registered waste tire transporter. If a facility delivers waste tires to a retailer who is serviced by a registered waste tire management facility, keep a file of the paid invoices that show disposal. The law requires a facility to maintain this record for one (1) year and make the file available for review by IDEM.

Remember that, as the generator of waste tires, a facility is ultimately liable if it uses an unregistered transporter that fails to transport tires to an appropriate processor, storage facility, or final disposal facility. Also be aware that outdoor accumulations of 1,000 or more waste tires are only permitted at IDEM registered storage sites that comply with storage requirement rules. The current list of registered waste tire transporters is available on the IDEM site at:

[www.in.gov/idem/files/wt\\_transporters.pdf](http://www.in.gov/idem/files/wt_transporters.pdf)

A list of Indiana's waste tire processors and storage facilities is available at:

[www.in.gov/idem/files/wt\\_processors\\_and\\_storage.pdf](http://www.in.gov/idem/files/wt_processors_and_storage.pdf).

If a facility generates waste tires, it must dispose of them using one or more of the following methods:

- Delivery to a wholesaler or to an agent of a wholesaler (a retailer),
- Delivery to a manufacturer of tires,
- Delivery to a facility that recycles tires,
- Delivery to a permitted final disposal facility regulated under IDEM's waste regulations,
- Delivery to a registered waste tire storage site,
- Delivery to a registered tire processing facility, or
- Delivery to a registered waste tire transporter

Keep in mind that waste tires are regulated as solid waste. Whole tire disposal is banned at landfills, making it necessary to alter tires by shearing across the bead into 4 relatively equal pieces or by cutting away each side wall from the tread, resulting in 3 pieces.

Shredded tires are also an acceptable disposal form for tires. Some landfills may require additional processing or may refuse to accept any tire material. Remember that commercial operations collecting and processing waste tires must obtain a certificate of registration from IDEM.

***Definitions of key terms:***

**Retailer:** A person engaged in the business of selling new tires at retail in Indiana.

**Used tire:** A tire that is suitable for use on a motor vehicle with at least two thirty-seconds (2/32) inch of remaining tread, or the tire wear bars are not exposed, free of damage or exposed cords. Also tires are stored in a rack, stack or row, out of the weather to prevent accumulation of water or precipitation in the tires. Tires removed from vehicles and piled up can be regulated as “waste tires.”

**Waste Tire:** A tire that is not suitable for the tire’s original purpose.

For any questions about the Indiana Waste Tire Management requirements and how they apply to a facility, please contact:

Hani Sharaya  
Compliance and Technical Assistance Program (CTAP)  
(800) 988-7901 or (317) 232-8174.

See detailed information on Indiana's Waste Tire Management Program at:  
[www.in.gov/idem/5124.htm](http://www.in.gov/idem/5124.htm)

***WIPES***

Wipes (industrial shop towels, rags, paper towels, gloves, cotton swabs, etc.) are not hazardous unless they come into contact with hazardous materials or hazardous wastes.

As wipes are used to clean up spills and remove oils, they become contaminated with automotive fluids and cleaning solvents.

A facility must make a hazardous waste determination on its used disposable wipes (Refer to the chapter entitled, “Complying with the Hazardous Waste Rules” for additional information on the processes used for making a waste determination). If the products used at the facility contain any of the following constituents, then the disposable wipes, when contaminated, could exhibit hazardous characteristics and may be regulated as a hazardous waste by IDEM:

- heavy metals such as arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver;
- chlorinated solvents such as monochlorobenzene; 1,4- dichlorobenzene; 1,2-dichloroethane; 1,1-dichloroethylene; pentachlorophenol; methylene chloride; trichloroethane; trichloroethylene; tetrachloroethylene and any chlorinated fluorocarbons; or
- toxic solvents such as benzene, toluene, xylene, pyridine, 2-ethoxyethanol, methylethyl ketone, and 2-nitropropane.

If the products used at the facility are a listed waste when discarded (i.e., contain a chemical or chemicals found on one of the hazardous waste “lists”), the contaminated wipes will automatically be a hazardous waste when disposed.

Contaminated wipes that are laundered are not regulated as a hazardous waste unless they are used to clean up spills of hazardous waste or unless a hazardous waste is added to the container of wipes. They are, however, still regulated by IDEM’s Office of Air Quality.

### **What Must be Done to be in Compliance?**

A facility can manage used wipes in a couple of different ways, depending upon the type of wipes that are used and the contaminant(s) that have been absorbed. Listed below are the requirements that must be followed when disposing of wipes.

#### ***For laundered wipes***

- If a facility is sending reusable wipes to a laundry, it must:
  - store contaminated wipes in closed containers to prevent the evaporation of any contaminants into the air.
  - ensure that storage containers are not accumulating free liquids in the bottom of the container. If the container has free liquids, transfer the free liquid into another container and manage by its hazardous classification. Laundries will not accept wipes containing free liquids.

#### ***For disposable wipes***

- Make a hazardous waste determination on used wipes. If the wipes are a hazardous waste, they must be managed accordingly.
- Do not air dry contaminated wipes to remove ignitable or toxic characteristics prior to disposal.
- Store contaminated wipes in closed containers to prevent the evaporation of any contaminants into the air

See the nonrule policy document on Management of Contaminated Wipes at:  
[www.in.gov/idem/files/mgmtcontaminatedwipes.pdf](http://www.in.gov/idem/files/mgmtcontaminatedwipes.pdf)

## **SPILL/RELEASE PREVENTION, REPORTING AND REMEDIATION**

A facility should work to avoid spills/releases and to implement spill response procedures to help ensure that spills and releases are managed effectively. Doing so will help to ensure that a facility does not have to perform a potentially costly cleanup.

## ***WHAT EXACTLY IS A “SPILL”? WHEN AND TO WHOM DOES A SPILL HAVE TO BE REPORTED?***

Under IDEM’s Spill Rule, a spill is defined as a release of more than one pint or one pound of an objectionable substance (such as oil, gasoline, solvents, antifreeze, etc.) that could threaten to enter the ground water or surface water of the State of Indiana. This definition includes spilling an objectionable substance on the ground, into the water, or into a drain that does not lead to a wastewater treatment plant.

A copy of the spill rule is available on IDEM’s Web site at:  
[www.in.gov/idem/4155.htm](http://www.in.gov/idem/4155.htm)

Not all spills are reportable. Whether or not a spill must be reported depends on several factors, including:

- The material spilled and it’s Reportable Quantity (RQ). Each hazardous material has its own RQ, requiring the spill to be reported if it meets or exceeds the gallons/pounds corresponding to its RQ.
- The location of the spill, including whether the location is part of a wellhead protection area; near a private drinking water well or State water with a designated use; water owned by the federal government; or within or outside the property boundary.
- Whether or not a spill response has been done.

**NOTE: Anytime there is a spill that reaches any waters of state (streams, ponds, ditches (perennial or intermittent), storm or sanitary sewers, wetlands, mudflats, sandflats, or other navigable waters etc.) it has to be reported immediately and a spill response will need to be conducted regardless of whether it is a hazardous material or not.**

As a general rule, all spills should be reported immediately if they:

- create a risk to public health from fire or explosion;
- are not contained within a building;
- come in contact with soil or water; or
- leave the property, or threaten to enter the waters of Indiana (including groundwater).

A facility may obtain additional information about spill reporting via IDEM’s Web site at [www.in.gov/idem/4155.htm](http://www.in.gov/idem/4155.htm) or by calling IDEM’s 24-hour Environmental Emergency Response hotline at 317/233-7745 (toll free at 888/233-7745). An IDEM Environmental Emergency Response staff member will provide assistance in determining whether or not the spill is reportable, and, if the spill is reportable, will also assist in determining which additional entities the spill must be reported to and what response actions must take place.

A sample Spill Emergency Notification form is located at the end of this chapter. A facility should complete this form and place a copy of it near each of the phones in facility for future reference.

If a facility fails to report and/or clean up a spill, it may be subject to an enforcement action.

## ***WHAT IF A SPILL/RELEASE OCCURS DURING VEHICLE CRUSHING ACTIVITIES?***

A facility may need to report the spill/release, if the amount of material spilled/released exceeds its Reportable Quantity.

Keep in mind that, even if the spill/release was not in an amount that exceeds the Reportable Quantity for that material, it must be cleaned up since releases of hazardous materials regardless of how much was spilled/released has to be properly disposed of. This must be done at the time the spill/release occurs.

A facility can minimize its chances of having spills/releases by removing anything that might be released from the vehicle during crushing activities prior to the vehicle being crushed.

## ***WHAT SHOULD A FACILITY DO IF THERE IS A SPILL?***

There are a number of things that a facility should do when responding to a spill/release at the facility. These include the following:

- if appropriate, turn on the ventilation systems to vent the vapors out of the building.
- alert others and call for help.
- if the spilled material is not flammable, set the containers upright and shut off the valves that released the material. If the container is damaged, place it in a compatible secondary container (e.g. bucket or overpack drum.)
- place a spill boom/sock around drains to prevent spill material from entering the drain.
- if applicable, have properly trained personnel put on personal protective equipment (safety glasses, apron, gloves), while cleaning up the material.
- clean up the spill, using appropriate methods, including:
  - scooping up the material with a dust mop and squeegee if possible (such as with spilled oil);
  - cleaning up the spill with a rag;
  - spreading an absorbent material; and
  - removing any soil impacted by the spill.
- containerize and make a hazardous waste determination on the spilled material, then manage it accordingly. Spill materials that are used to clean up used oil may be managed under the Used Oil Rule if the facility is following the Used Oil Rule and burning the used oil for energy recovery. See the section on Oil Used for further information on the Used Oil Rule.
- report spills to IDEM's 24-hour Environmental Emergency Response hotline as soon as possible, but no later than two hours after the incident, by calling (317) 233-7745 or toll free at (888) 233-7745. The Environmental Emergency Response hotline is staffed 24-hours a day, 7-days a week. Environmental Emergency Response staff will request the following information:
  - facility's name, address, and EPA Identification Number (if applicable);

- date, time, and type of incident (e.g., spill, fire etc.);
- quantity and type of hazardous material involved in the incident;
- extent of injuries, if any;
- estimated quantity and disposal of recovered materials, if any; and
- acknowledgement that the facility is located within a wellhead protection area (if it is.)

***Don't wait to report the spill. Call the 24- hour Environmental Emergency Response hotline even if the above-listed information is not available.***

- when the spill is reported, IDEM will assist in notifying downstream users; however, it remains the facility's responsibility to notify downstream users of potentially contaminated water.
- notify the chief of the responding fire department when a release of hazardous materials creates an unreasonable risk to public safety from fire or explosion.
- if material enters a drain that leads to a wastewater treatment plant, the facility may be required to call the local wastewater treatment plant to notify them of the spill. Whether or not a facility is required to report a spill depends upon the quantity and the material(s) spilled.
- if a facility is located in a Wellhead Protection Area, there may be additional spill reporting requirements. Contact the local public water supply system to determine these requirements. Use IDEM's "Public Water Supply Information Search" database at [www.in.gov/idem/5095.htm](http://www.in.gov/idem/5095.htm) or contact IDEM's Drinking Water Branch at (317) 234-7435.

## ***HOW SHOULD A FACILITY PREPARE FOR SPILL/RELEASE SITUATIONS?***

The hazardous waste rules require that small quantity generators (more requirements apply to large quantity generators):

- keep a spill kit on hand and replenish the kit with any materials that were used during a clean up operation.
- train employees on the proper response to chemical emergencies.

See the following chapter, entitled "Emergency Plans and Employee Training," for additional emergency planning and training information.

**GOOD IDEA:** To avoid a spill or reduce the amount of material that could potentially be spilled, a facility may want to consider the following:

- pump liquid products directly from one area to another when possible (e.g. use an on-vehicle/closed-loop antifreeze recycler or add motor oil via a hose.)
- drain automotive fluids in a designated area where there are no connections to the storm drain or municipal sewer.
- collect leaking or dripping fluids in designated drip pans or containers. Keep all fluids separate so they may be recycled. When a facility is finished working on a vehicle, immediately empty contents of drip pans into appropriate collection containers.
- if possible, keep all facility drains sealed, using an inflatable plug or absorbent pillow, to eliminate the possibility of spill materials entering the drain.
- remove anything from the vehicle, which may cause a spill or release prior to crushing the vehicle.

## **SPILL EMERGENCY NOTIFICATION**

**\*\*\*POST NEAR THE PHONE\*\*\***

Fire Department Phone #: \_\_\_\_\_

Police Department Phone #: \_\_\_\_\_

**IDEM Emergency Response Branch (24hours/day, 7 days/week)**  
**(317) 233-7745 or toll free (888) 233-7745**

County Health Department Phone #: \_\_\_\_\_

Local Public Works/Sewer Department Phone #: \_\_\_\_\_

Recovery Contractors's Name: \_\_\_\_\_

Phone #: \_\_\_\_\_

State Emergency Planning Commision Phone #: \_\_\_\_\_



**\*National Response Center (24 hours/day, 7 days/week)  
(800) 424-8802**

\* Local Emergency Planning Committee

Phone #: \_\_\_\_\_

(contact the local Emergency Mgmt. Agency or County Health Dept. for the LEPC area content.)

\*IDEM's Spill Hotline staff will help a facility determine if spills must be reported to these entities.

## **EMERGENCY PLANS AND EMPLOYEE TRAINING**

Various plans, records, reports and employee training are required depending upon the activities conducted at a particular facility (e.g., the facility's generator category, whether the facility removes freon from MVAC systems, etc.). It is very important that the facility's operations are well known in order to determine which of the following requirements must be complied with.

The information provided in this section applies to the activities that occur at most auto salvage facilities. Additional plans, record keeping/reporting and employee training requirements may apply to the facility depending upon the activities that occur.

### ***EMERGENCY PLANS***

#### **Hazardous Waste Emergency Procedures/Contingency Plans**

If a facility is a small quantity generator of hazardous waste, it must assign an emergency coordinator, who is responsible for the following duties:

- Posting the following information next to the facility's telephones:
  - the name and telephone number of the facility's emergency coordinator;
  - the location of the spill control material, fire extinguisher(s), and, if present, fire alarm; and
  - the telephone number of the fire department (unless the facility has a direct alarm.)

- Ensuring that all employees are thoroughly familiar with proper hazardous waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies;
- Responding to emergencies that arise at the facility by doing the following:
  - In the event of a spill, contain the flow of hazardous material to the extent possible, and clean up the hazardous material and any contaminated materials or soil as soon as practicable (assuming the employees have been properly trained in conducting these activities);
  - In the event of a fire, call the fire department or put out the fire using a fire extinguisher; Immediately notify the chief of the responding fire department when a release of a hazardous material creates an unreasonable risk to public safety from fire or explosion. In the event of a fire, explosion, or a release which could threaten human health outside of the facility, or when there is knowledge that a spill has reached surface water, IDEM's Emergency Response Section must immediately be notified at (317) 233-7745 or toll free at (888) 233-7745. IDEM will request the following information :
    - the facility's name, address, and EPA Identification Number if applicable;
    - date, time, and type of incident (e.g., spill, fire etc.);
    - quantity and type of hazardous material involved in the incident;
    - extent of injuries, if any;
    - estimated quantity and disposition/makeup of recovered materials, if any; and
    - acknowledgment that the facility is located within a Wellhead Protection Area (if the facility is.)

Note that, if the facility is a large quantity generator, it is required to develop and maintain on-site a contingency plan, rather than the emergency procedures discussed above.

## **Spill Prevention, Control, and Countermeasure Plan**

Depending on a facility's total aboveground capacity to store all types of oils(petroleum, synthetic, animal, or vegetable) and petroleum based fuels(product or waste), it may be subject to the Federal Spill Prevention, Control and Countermeasure (SPCC) Rule (40 CFR 112).

This is a spill and oil pollution prevention rule, promulgated under authority of the Federal Clean Water Act, which imposes certain requirements intended to prevent the discharge of oils to "navigable waters" (essentially any type of waterway, including aquifers or natural or manmade conduits which discharge to navigable waters), and requires a formal facility-specific plan for controlling and cleaning up an oil spill if and when one occurs.

The SPCC Rule, as revised effective February 26, 2007, does not apply unless the total aggregate above-ground storage capacity for all oils at a facility exceeds 1,320 gallons (not counting containers of less than 55 gallon capacity, and not counting buried tanks which are subject to the Underground Storage Tank regulations at 40 CFR 280 and 281).

If your facility's total above-ground product and waste oil storage capacity does exceed

1,320 gallons, some of the basic requirements of this rule include providing secondary containment, performing periodic integrity tests for tanks and containers, and having an SPCC plan for spill control and cleanup which has been certified by a professional engineer.

Compliance with SPCC is handled by the U.S. Environmental Protection Agency Region 5 office in Chicago. Information or questions regarding compliance with SPCC may be referred to that office at (312) 353-8200.

Here is the U.S. EPA webpage on the “Revised Spill Prevention, Control and Countermeasure Rule.” [www.epa.gov/emergencies/content/spcc/index.htm](http://www.epa.gov/emergencies/content/spcc/index.htm).

## ***EMPLOYEE TRAINING***

### **Hazardous Waste Emergency Training**

If a facility is a small quantity generator of hazardous waste, it must:

- Assign an emergency coordinator to perform the following duties:
  - post the following information next to the telephone:
  - the name and telephone number of the facility's emergency coordinator;
  - the location of the facility's fire extinguisher(s), spill control material, and, if present, fire alarm; and
  - the telephone number of the fire department (unless the facility has a direct alarm.)
- Ensure that all employees are thoroughly familiar with proper hazardous waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
- Respond to emergencies that arise by doing the following:
  - in the event of a fire, call the fire department or put out the fire using a fire extinguisher;
  - in the event of a spill, contain the flow of hazardous material to the extent possible, and clean up the hazardous material and any contaminated materials or soil as soon as practicable (if the employees have been properly trained to perform these tasks);
  - in the event of a fire, explosion, or a release which could threaten human health outside of the facility, or when there is knowledge that a spill has reached surface water, IDEM's Emergency Response Section must be immediately notified at (317) 233-7745 or toll free at (888) 233-7745. A facility must provide the following information to IDEM:
    - facility's name, address, and EPA Identification Number, if applicable;
    - date, time, and type of incident (e.g., spill, fire, etc.);
    - quantity and type of hazardous material involved in the incident;
    - extent of injuries, if any; and
    - estimated quantity and disposition/makeup of recovered materials, if any.

Note that, if a facility is a large quantity generator, it is required to provide its employees with more extensive training than that discussed above. In addition, it will need to have written documentation concerning the training and the employees being trained. Information concerning the training requirements that large quantity generators must comply with can be found on IDEM's Web site at [www.in.gov/idem/files/hwpersonneltraining.pdf](http://www.in.gov/idem/files/hwpersonneltraining.pdf)

## **Other Training**

Regardless of the amount of hazardous waste that is generated, a facility's employees must be trained by an EPA-certified program if they are working on MVAC systems. A list of EPA-certified training programs is available on EPA's Web site at [www.epa.gov/ozone/title6/609](http://www.epa.gov/ozone/title6/609) or can be obtained by calling EPA's Stratospheric Ozone Hotline at (800) 296-1996.

# **RECORDKEEPING/REPORTING**

## ***HAZARDOUS WASTE***

If a facility is a small quantity generator or a large quantity generator they must:

- Determine the hazardous waste generator classification for the facility and document the classification. In order to do this, records of the amount of hazardous waste must be kept:
  - generated, accumulated and stored on-site; and
  - recycled on-site or manifested off-site. A signed copy of the manifest returned from the TSD must be kept at the facility that generated the waste for a minimum of three years.
- Complete EPA Form 8700-22 (Uniform Hazardous Waste Manifest Form) each time facility ships hazardous waste to an off-site treatment, recycling, storage or disposal facility. (Information on the uniform hazardous waste manifest system can be found on IDEM's Web site at: [www.in.gov/idem/5039.htm](http://www.in.gov/idem/5039.htm))
  - The person who signs the manifest must have received proper training on the manifest form and procedures.
  - Each party that takes possession of the waste must sign the original manifest and keep one copy. The remaining portion of the manifest continues on with the hazardous waste shipment until it reaches its final destination.
  - The Treatment, Storage or Disposal (TSD) facility must send a signed copy of the manifest back to the facility to verify that the shipment actually arrived.
  - If the copy of the manifest is not sent to the facility within 35 days of the date the waste was accepted by the hauler, the facility must contact its hauler and/or the designated facility to determine the status of the hazardous waste (required for LQG).
  - If the copy of the manifest is not sent to the facility within 45 days of the date the waste was accepted by its hauler, the facility must complete an exception report (required for LQG) that:
    - is accompanied by a legible copy of the manifest for which a facility does not have confirmation of delivery.

- is accompanied by a letter that a facility representative has signed. The letter must explain the efforts the facility has taken to locate the hazardous waste and the results of those efforts.
- If the copy of the manifest is not sent to the facility within 60 days of the date the waste was accepted by the hauler, the facility must submit a legible copy of the manifest, along with a note or letter indicating that the facility has not received confirmation of delivery (required for SQG). Send this letter to IDEM's Office of Land Quality.
- Keep copies of all hazardous waste manifests for 3 years.

Effective September 5<sup>th</sup>, 2006 the NEW Hazardous waste manifest, form approved OMB No2050-0039 **EPA form # 8700-22** MUST be used. Indiana has no state manifest tracking system. See the reporting requirements in this chapter.

All Hazardous waste handlers (Generators, Treatment, storage, disposal facilities) must obtain the new forms from any source that has been approved by the EPA Manifest Registry (web site to link to: [www.epa.gov/epawaste/hazard/transportation/manifest/registry/index.htm](http://www.epa.gov/epawaste/hazard/transportation/manifest/registry/index.htm) or [www.epa.gov/epawaste/hazard/transportation/manifest/registry/printers.htm](http://www.epa.gov/epawaste/hazard/transportation/manifest/registry/printers.htm) The list below is registered suppliers of the Uniform Hazardous Waste Manifest.

No.	Registrant Name	Are Manifests for Sale?	To Purchase Manifests, Please Contact:	Approved Manifest Tracking Number (MTN) Suffix	Approval Date
002	J.J. Keller & Associates, Inc.	Yes	1-877-564-2333 <a href="http://www.jjkeller.com/manifest">www.jjkeller.com/manifest</a>	JJK	05/16/06
005	The Flesh Company	Yes, through distributors. Call for contact information.	1-800-745-7910	FLE	05/18/06
003	Welsh & Associates	Yes	317-894-8100 <a href="http://www.welsh-associates.com">www.welsh-associates.com</a>	WAS	05/25/06
009	Giant Resource Recovery	No		GRR	05/26/06
007	Genoa Business Forms	Yes	815-981-8126 <a href="http://www.form8700-22.com/">www.form8700-22.com/</a>	GBF	06/16/06
004	The Allied Group	Yes	1-800-556-6310 x3227	TAG	08/01/06
020	Veolia ES Technical Solutions	No		VES	08/02/06
010	Nutmeg Environmental	Yes	203-915-3769 <a href="http://www.nutmegenv.com">www.nutmegenv.com</a>	CTN	08/02/06

## **Recordkeeping for Hazardous Waste Manifests:**

All of the following must submit annual manifest reports to IDEM:

- Indiana small-quantity generators (SQGs), large-quantity generators (LQGs), and treatment, storage, and disposal (TSD) facilities, and
- Generators who are normally conditionally exempt small-quantity generators (CESQGs) that for any one calendar month generate more than 100 kilograms (220 pounds) or accumulate on site at any time more than 1,000 kilograms (2,200 pounds) of hazardous waste.

SQGs (also CESQGs over their generation or accumulation limits) will be required to submit the annual report by March 1 of each year. LQGs and TSD facilities will be required to submit the hazardous waste biennial report, required by the U.S. EPA, on March 1 of the even numbered years (i.e. 2008) and the IDEM annual manifest report on March 1 of the odd numbered years (i.e. 2009).

Indiana Annual Manifest reporting web site: [www.in.gov/idem/5038.htm](http://www.in.gov/idem/5038.htm)

## ***AIR***

If a facility performs work on motor vehicle air conditioning (MVAC) systems, it must submit a one-time equipment owner certification form to EPA and it must maintain the following records and certifications on-site:

- EPA equipment owner certification form for recovery or recovery/recycling machines (only one form must be submitted, even if a facility has more than one machine.)
- certification forms for each trained technician and facility operator.
- invoices and records documenting recovered refrigerant that was sent off-site for reclamation.
- documentation of refrigerant purchase

## ***STORM WATER***

Facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards may be subject to the Industrial Storm Water general permit found at 327 IAC 15-6 (Rule 6).

Facilities operating under the following SIC codes that have a point source discharge of storm water exposed to industrial activity are required to obtain the Rule 6 permit.

- 5015 (motor vehicles parts, used);
- 5093 (scrap and waste materials).

The following Rule 6 permit requirements must be submitted to IDEM upon completion. It is always the facility operator, rather than the property owner, that is responsible for compliance with Rule 6, and/or other Storm Water discharge limitations and requirements.

- A facility must create and implement a Rule 6 Storm Water Pollution Prevention Plan (SWPPP) in accordance with 327 IAC 15-6-7. When a facility has completed development of the SWPPP, it must submit a Storm Water Pollution Prevention Plan Certification checklist to IDEM. A copy of the SWPPP Certification checklist can be found on IDEM's Web site at: [www.in.gov/icpr/webfile/formsdiv/51287.pdf](http://www.in.gov/icpr/webfile/formsdiv/51287.pdf)
- Facility representatives are required to submit testing results from an annual "grab" (no composite) sample by using the Storm Water Discharge Monitoring Report. A copy of the Storm Water Discharge Monitoring Report can be found on IDEM's Web site at: [www.in.gov/icpr/webfile/formsdiv/53590.pdf](http://www.in.gov/icpr/webfile/formsdiv/53590.pdf). IDEM may require additional sampling for "any other pollutant" attributable to a facility's industrial activity that is reasonably expected to be present in the discharge.
- Facilities regulated under Rule 6 shall submit a General Permit Annual Report. The General Permit Annual Report from 54185 can be found on IDEM's Web site at: [www.in.gov/idem/5157.htm#owq\\_stormwater](http://www.in.gov/idem/5157.htm#owq_stormwater).

IDEM's main page on Rule 6, Storm Water Runoff Associated with Industrial Activity, is available at [www.in.gov/idem/4901.htm](http://www.in.gov/idem/4901.htm) or contact IDEM's Industrial Storm Water Specialist at (317) 234-5029 or (800) 451-6027, extension 45029.

### **For the local POTW**

- Contact the local publicly owned treatment works (wastewater treatment plant) to notify them prior to discharge of industrial wastewater.
- Submit a one-time notification form to the POTW (and to IDEM's Office of Land Quality) if the facility is discharging hazardous waste to the sanitary sewer.
- Report spills.

### **For the local fire department**

- Report spills.

## **NOTIFICATIONS AND PERMITTING**

### ***AIR REGULATIONS***

#### **Open Burning**

Businesses are not allowed to conduct open burning of any kind. There are, however, a few exceptions. These are as follows:

#### ***Live fire training exercise***

On occasion, fire departments have requested and received variances from IDEM's Office of Air Quality (OAQ) in order to burn cars as part of a live fire training exercise.

These exercises normally take place at a particular auto salvage facility, where the facility is responsible for properly disposing of the vehicle at the conclusion of the exercise.

Variances of this type are requested by and issued to the fire department conducting the training activity.

### ***Fire extinguisher training***

Businesses are permitted to perform fire extinguisher training using clean petroleum products. A facility may need to obtain a variance from IDEM in order to conduct this activity depending upon the amount of fuel used for the training. Open burning associated with fire extinguisher training using no more than 14 gallons of fuel per day is exempt, that is, does not require a variance. Using more than 14 gallons of fuel per day, or using a fuel other than a clean petroleum product, does require a variance. All fire extinguisher training, exempt or by variance, has to be conducted in compliance with a list of burn conditions which are detailed in Indiana's Open burning rule (See 326 IAC 4- 1-3(b)(c)(8)(A-E)).

### ***Prescribed vegetation burns***

In certain instances, facilities are allowed to conduct prescribed vegetation burns on-site to improve the appearance of the site with wildflower or prairie grass plantings. A facility will need to obtain a variance from IDEM's OAQ for this activity.

### ***Property maintenance***

A variance from IDEM's OAQ is required for open burning of tree waste derived from property maintenance activities or expansion in an area involving the clearing of woody vegetation or trees if the amount of tree waste measures 1,000 cubic feet or less and contains no tree stumps. If the tree waste derived from property maintenance or clearing exceeds 1,000 cubic feet or contains any tree stumps, a facility will need to use an air curtain destructor. A facility must obtain an approval letter from IDEM when using an air curtain destructor.

### ***Emergency burns***

Emergency burning with prior oral approval of the Commissioner of IDEM or the Commissioner's designated agent may be authorized for the following:

- Spilled or escaping liquid or gaseous petroleum products when all possible efforts to recover the spilled material have been made and failure to burn would result in an imminent fire or health hazard or air or water pollution problem; or
- Clean wood waste, vegetation or deceased animals resulting from a natural disaster where failure to burn would result in an imminent health or safety hazard.

Note: The disposal of dead animals is regulated by the Indiana Board of Animal Health.



The Commissioner of IDEM or the Commissioner's designated agent will issue a written approval within 7 days of the oral approval. The written approval will contain any conditions on emergency burning that the Commissioner established in the oral approval. Keep in mind that waste that is regularly generated as a result of a routine business operation cannot be open burned.

For questions concerning open burning and variances, contact IDEM's Office of Air Quality at (317) 233-0178 (toll free at (800)451-6027, and ask extension 3-0178).

## **Sweat Furnaces**

A “sweat furnace” enables recyclers to convert piles of mixed aluminum scrap into more uniform, saleable ingots or sows and is likely covered by NESHAPs for secondary aluminum – 326 IAC 20. If a facility plans to utilize a sweat furnace (or if there is already one on-site), the facility may be required to obtain a permit for it prior to putting it into operation. For information concerning the requirements for sweat furnaces, contact IDEM's Air Permit Reviewer of the Day at (317) 233-0178 (toll free at (800) 451-6027, and ask for extension 3-0178) or via e-mail [oamprod@idem.IN.gov](mailto:oamprod@idem.IN.gov) for further questions.

## ***WASTE REGULATIONS***

### **Hazardous Waste**

There are potentially a number of regulations that a facility must comply with if the facility generates and/or stores hazardous waste. These are discussed in detail in the earlier chapter entitled, “Complying with the Hazardous Waste Rules.” If a facility generates hazardous waste, it may need to submit a Notification to IDEM concerning this activity. In addition, if a facility treats, stores or disposes of hazardous waste it may need a permit from IDEM before beginning any of these activities. Information concerning the Notification and Permit requirements can be obtained by visiting EPA’s Web site at [www.epa.gov/epawaste/hazard/tsd/permit/](http://www.epa.gov/epawaste/hazard/tsd/permit/) or by contacting IDEM at (317) 232-7956 (toll-free at (800) 451-6027, and ask for extension 2-7956).

### **Solid Waste**

Solid waste generated by activities at the facility must be properly disposed of. No notifications are required by IDEM for disposal of general lunchroom and nonhazardous solid waste. A facility needs to ensure, however, that it makes a hazardous waste determination for all industrial waste streams generated. The waste determination a facility makes will determine the type of treatment, disposal or recycling options. Refer to the earlier chapter entitled, “Complying with the Hazardous Waste Rules” for information concerning the process to be used for making a waste determination and disposal of hazardous waste.

If a facility wishes to construct and operate on-site a facility for the handling or disposal of solid waste, it will require a permit from IDEM. Be aware that construction and operation of these types of facilities can require substantial resources and technical expertise to perform all the site evaluation and permit application preparation necessary to obtain such a permit, as well as the cost associated with application fees, annual operating fees, land acquisition, facility construction, operation, groundwater monitoring and the risk of liability. Each permit is valid for 5 years.

If a facility wishes to operate a waste tire storage facility or waste tire processing facility, it must first obtain a certificate of registration from IDEM. To obtain a registration application or to learn more about IDEM's Waste Tire Program, call (317) 232-0066 (toll free at (800) 988-7901, extension 2-0066).

For additional information on waste tire management at the facility, see "Waste Tires" in the earlier chapter entitled, "Potential Waste streams."

## ***WATER REGULATIONS***

### **Drinking Water**

As discussed earlier in the chapter "Environmental Regulations That May Apply To Your Facility", if a facility provides drinking water to its customers or the public, it may be considered a public drinking water supply. Anyone qualifying as a Public Water Supply (PWS) must obtain a Drinking Water Construction Permit prior to constructing, installing, or modifying any facility, equipment, or devices to provide drinking water including, but not limited to; wells, water mains of any length, chemical additions, booster stations (pumps), storage tanks, or drinking water treatment plants. There is a fee associated with the permit; the amount is dependent on the particular type of construction involved.

A PWS must not only comply with all the requirements of the IDEM Drinking Water Construction Permit Program, but after construction, the PWS must continuously comply with all the health based requirements established in the U.S. Safe Drinking Water Act. Included in these requirements are rules that establish operational standards, outline analytical methodologies for sampling, testing, monitoring and reporting on a wide range of possible contaminants, and establish maximum contaminant levels (MCLs) intended to protect human health. The content of these rules varies, depending upon the type of public water supply system involved. These rules also set out the various public notice requirements to be met by owners or operators of public water systems that fail to comply with the MCLs.

Some public water supply systems are required to be operated by an IDEM-certified operator. Although only one person must be designated as the certified operator with complete responsibility for the proper operation of a facility, all persons involved in the operation of a facility are encouraged to become certified. Certifications are permanent in nature but are effective only when validated by a current certification card. All Operator Certification Cards are valid for 3 years and must be renewed for the operator to remain certified.

## Motor Vehicle Waste Disposal Wells

A motor vehicle waste disposal well (MVWD well) is a type of Class V injection well. Typically, they are shallow disposal systems that receive or have received fluids from vehicle repair or maintenance activities. In general, these wells are areas that are tied into a shallow disposal system. Most often, these disposal systems are septic systems or dry wells, but any underground system that receives motor vehicle waste would be considered a MVWD well. Some examples include: cesspools, catch basins, sinkholes, underground vaults, or drain tanks.

There are two key dates that apply to MVWD wells located in Indiana. They are as follows:

- New MVWD wells were prohibited from being constructed as of April 5, 2000.
- Existing MVWD wells must be closed or permitted by January 1, 2007.

If a facility has a MVWD well and wish to close it, it will need to contact the United States Environmental Protection Agency (EPA) in writing 30 days prior to closing the well. A facility may need to complete a pre-closure notification form or write a letter prior to closing the well. If so, this will also need to be submitted at least 30 days before closing the well. In addition, a facility will need to permanently plug or otherwise close the well in a way that protects underground sources of drinking water and is approved by EPA. Lastly, a facility will need to dispose of (or otherwise manage) any soil, gravel, sludge, liquids or other materials removed from or adjacent to the well in a manner that complies with state environmental requirements.

For further information on sampling procedures for closure see EPA's guidelines on Sampling Procedures located on their web site at:  
[www.epa.gov/region5/water/uic/classv/r5mvwdw.htm](http://www.epa.gov/region5/water/uic/classv/r5mvwdw.htm)

If a facility has a MVWD well and wish to continue to use it, must apply to EPA for a waiver in order to continue to utilize the well. This requires that a facility submit a permit application to EPA. If a waiver is granted, there are certain requirements a facility must meet in order to continue use of its well. These include:

- Ensuring that the waste fluids meet National Primary Drinking Water Standards (Maximum Contaminant Levels, also referred to as "MCLs") and other healthbased standards at the point at which the waste enters the well.
- Implementing best management practices (as contained in the permit) to lessen the chances that contaminants will enter the discharge.
- Conducting monitoring of the waste and/or sludge being injected to ensure that it is in compliance with the MCLs. This monitoring will need to be conducted both initially and on an on-going basis.

Note that, if a waiver is not granted, a facility will need to close the well.

For information concerning the proper procedures for closing or obtaining a permit for a motor vehicle waste disposal well, contact EPA at the following address:

United States Environmental Protection Agency  
UIC Branch (WU-16J)  
77 West Jackson Boulevard  
Chicago IL 60604-3590.  
Phone (for UIC Branch): (312) 886-4237  
[www.epa.gov/region5/water/uic/classv/r5mvwdw.htm](http://www.epa.gov/region5/water/uic/classv/r5mvwdw.htm)

## **Storm Water**

The storm water generated from a facility may be regulated by IDEM's Rule 6 storm water regulations if it has a new or existing discharge composed entirely of storm water exposed to industrial activity. Two types of permits are available: general and individual.

General permits are most often obtained by auto salvage facilities. However, in some cases, an individual permit may be required. To obtain a general permit, a facility will need to submit a Notice of Intent (NOI) to IDEM's Office of Water Quality, Rule 6 Program.

Within 365 days of submitting the NOI, a facility must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP needs to be certified by a “qualified professional” and the SWPPP Certification Checklist needs to be submitted to IDEM, Office of Water Quality, Rule 6 Program. The SWPPP requires a facility to identify activities and industrial areas that contribute to or have the potential to contribute to storm water contamination, identify where best management practices need to be established, and conduct sampling. See the section on Storm Water in the previous chapter for more information. See also the IDEM “Industrial Storm Water Permitting 327 IAC 15-6 (Rule 6)” webpage at [www.in.gov/idem/4901.htm](http://www.in.gov/idem/4901.htm). Questions concerning the Rule 6 Storm Water rules should be directed to the Industrial Storm Water Specialist at (317) 234-5029 toll-free at (800) 451-6027, and ask for extension 4-5029).

## **Wastewater**

If a facility generates an industrial wastewater, there may be requirements it must meet in order to ensure that the wastewater is properly managed. There are two situations in which a facility might be required to obtain a permit for wastewater generated by the facility, depending upon how it's ultimately disposed of. These two situations are discharges to waters of Indiana and discharges to a publicly owned treatment works (POTW).

***Discharges to waters of Indiana.*** If a facility discharges industrial wastewater via a “point source” (such as a pipe, etc.) directly to waters of Indiana, it will be required to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit.

An individual NPDES storm water permit sets individual discharge limits. Waters of Indiana include (but are not limited to) ground water, storm drains, rivers, streams, lakes and ditches. NPDES permits can be either general or individual permits. A general permit is a “one size fits all” type of permit and are issued for specific types of discharges such as storm water runoff, non-contact cooling water or stone quarry discharges. An individual permit is site-specific and unique to a facility. Rule 6 storm waters permits, such as those discussed above, are

considered NPDES general permits, which require “report only” for eight parameters listed in Rule 6. Permits contain limits on the quantity, discharge rate and concentrations of pollutants in the water that is discharged from a point source into waters of the state. There are permit fees associated with these permits. The amount of the fee is dependent upon the type of permit issued.

***Discharges to a POTW.*** If a facility discharges industrial wastewater into a municipal sewer connected to a POTW, it may need to obtain a pretreatment permit. In order to discharge to the POTW, it must meet standards set by the receiving POTW. This may require that a facility treat its wastewater prior to discharging it to the sewer. In Indiana, 45 municipalities implement U.S. EPA approved pretreatment permit ordinances. They are:

Anderson	Evansville	Jasper	Michigan City	Seymour
Auburn	Fort Wayne	Jeffersonville	Mishawaka	Shelbyville
Bloomington	Frankfort	Kendallville	Muncie	South Bendy
Bremen	Gary	Kokomo	New Albany	Speedway
Columbus	Goshen	Lafayette	New Castle	Terre Haute
Connersville	Greensburg	LaPorte	North Vernon	Valparaiso
Crawfordsville	Hammond	Logansport	Plymouth	Vincennes
East Chicago	Huntington	Madison	Princeton	Wabash
Elkhart	Indianapolis	Marion	Richmond	Warsaw

If a facility is located in one of these municipalities and it wishes to discharge industrial wastewater into the POTW, it will need to contact the local POTW program coordinator to obtain a permit. If a facility wishes to discharge into a municipal sewer in a location other than those listed above, it must first submit an Industrial Wastewater Pretreatment Permit application to IDEM so that it can be determined whether a permit is required.

Depending upon the type and level of contaminants in a facility's wastewater, the wastewater may be considered a hazardous waste. When hazardous waste enters the sanitary sewer, it is no longer regulated by the hazardous waste rules, but is regulated by IDEM and the POTW receiving the wastewater. If this situation applies to a facility, it may need to submit a one-time notification to the local POTW and IDEM's Office of Land Quality.

***Discharges to holding tanks.*** If a facility discharges wastewater to a holding tank, it may need to obtain a construction permit from IDEM's Office of Water Quality prior to installation of the tank. In addition, different regulations apply to wastewater removed from the tank, depending on the contents of the tank and the method of disposal used.

- Wastewater that meets POTW's standards may be hauled directly to the POTW. If a facility's wastewater does not meet the POTW's standards, but does meet the standards of another permitted POTW, wastewater may be hauled to that POTW.
- If a facility disposes of its wastewater in a manner other than sending it to a POTW, it will need to determine whether it is a hazardous waste. If a facility's wastewater is a hazardous waste, it will need to ensure that the tank storing this wastewater in meets the requirements contained in the hazardous waste rules and that the facility properly

manages its wastewater upon removing it from the tank. See the earlier chapter entitled “Complying with Hazardous Waste Rules” for additional information.

## **Wetlands**

Swamps, marshes, bogs, fens, sloughs and bottomlands are examples of areas that may be considered wetlands. In general, wetlands are areas where water accumulates at or near the surface for some part of the year. Some types of wetlands, such as cattail marsh, are easy to recognize, while others such as pin oak flat woods require professional experience.

Both federal and state law requires authorization from IDEM before conducting any activity that may result in a discharge of pollutants (including fill) to wetlands. This means that if a facility wishes to discharge pollutants to wetlands or other water bodies through activities such as filling, excavating or mechanical clearing, it must first receive authorization from the state. Placement of motor vehicles in wetlands is considered “filling” and would require that a facility obtain a permit.

See IDEM’s “Obtaining a Water Quality Certification for the Placement of Dredged or Fill Materials within Wetlands or Other Water bodies” at [www.in.gov/idem/4870.htm](http://www.in.gov/idem/4870.htm)

Most activities that result in wetland fill also require a Department of Army permit from the U.S. Army Corps of Engineers (Corps), commonly referred to as a Section 404 or Dredge and Fill Permit. Discharges to wetlands that also happen to be in a floodway also require authorization from the Indiana Department of Natural Resources (IDNR). IDEM works closely with the U.S. Army Corps of Engineers and the IDNR to coordinate the permit application process as much as possible. The Corps’ decision concerning the extent of federal jurisdiction affects the mechanism under which IDEM reviews a particular project. Therefore, IDEM recommends that any potential applicant first contact the Corps to begin the application process and determine whether a federal permit is required.

However, because both agencies have somewhat different authority/jurisdiction, both agencies need to be contacted before any discharge to or activity in a wetland or other water body occurs. If the Corps of Engineers determines that a federal permit is needed, a facility must first obtain a Section 401 Water Quality Certification from IDEM.

IDEM will review the proposed activity to determine if it will comply with Indiana law, including state water quality standards. IDEM will require a facility to avoid impacts if possible, minimize any unavoidable impacts and provide compensatory mitigation for any remaining adverse impacts to wetlands and other waters. IDEM will deny water quality certification if a facility cannot show that its discharges will comply with state law and may cause violations of water quality standards. As an example, IDEM may deny certification if the impact can be avoided or the proposed compensatory mitigation cannot offset adverse impacts to water quality. A facility may not proceed with a project until it has received a certification (or other authorization) from IDEM.

If the Corps determines that a federal permit is not needed under section 404 of the CWA, then another form of authorization from IDEM is usually required. This is likely to be the case for “isolated wetlands” where the Corps has determined that it has no basis for federal jurisdiction.

Again, because the federal government's jurisdiction is different than the state's, IDEM must be contacted to determine what, if any, state authorization is needed before a facility may legally discharge pollutants (including fill material) to a wetland.

## ***UNDERGROUND STORAGE TANK REGULATIONS***

If a facility owns or operates an underground storage tank (UST), the tank may be regulated under IDEM’s underground storage tank regulations. If the tank contains regulated hazardous waste, then it’s regulated under the hazardous waste rules rather than the UST rules.

An underground storage tank is a tank or combination of tanks that hold regulated substances and have at least 10% of their volume underground (including any underground piping connected to the tank.). USTs are generally made from steel or fiberglass and are meant to hold substances such as petroleum products or hazardous substances. These substances, in turn, are regulated by IDEM. Farming or residential tanks with a capacity of no more than one thousand one hundred (1,100) gallons that are storing motor fuel for noncommercial purposes, tanks that contain heating oil used to heat a facility, tanks located on or above the floor of underground areas (such as basements) and tanks of 110 gallons or smaller are not considered USTs. Septic tanks and systems for collecting storm water and wastewater, surface impoundments such as pits, ponds or lagoons, are also not considered USTs.

If a facility owns or operates an UST, it must complete and submit a Notification for Underground Storage Tanks form (Form 45223), within 30 days of the occurrence of the following situations: new tank/piping new owner/operator, upgrade, repair, temporary closure, change-in-service or permanent closure. A copy of this notification form can be obtained via IDEM’s Web site at: [www.in.gov/icpr/webfile/formsdiv/45223.doc](http://www.in.gov/icpr/webfile/formsdiv/45223.doc) (Note that it is a MS Word document.)

Keep in mind that a facility must ensure that whoever performs or oversees tank system installations, testing, upgrading, closure, removal and change-in-service is certified by the Indiana Department of Homeland Security, Division of Fire & Building Safety (see contact information near the beginning of this manual). The certified person must sign and provide the OSFM certification number on all Notification for Underground Storage Tanks forms when a tank is installed, upgraded, tested or permanently closed. Every UST system in use and every new UST system to be put in use must be protected from corrosion, have spill and overflow protection, have a leak detection system and must be registered with IDEM. Tank fees are \$90 per year for each regulated petroleum tank and \$245 per year for each hazardous substance tank. To obtain additional information about IDEM’s UST program, call (317) 232-8854.



Information on the Underground Storage Tank program is also available on IDEM's Web site at [www.in.gov/idem/4999.htm](http://www.in.gov/idem/4999.htm) and at [www.in.gov/idem/5894.htm](http://www.in.gov/idem/5894.htm)

## **LIABILITY AND ENFORCEMENT ACTIONS**

### ***CHOOSING AN ENVIRONMENTAL SERVICE COMPANY***

As a waste generator, it is a facility's responsibility to ensure that its wastes are managed, transported and disposed of in an environmentally responsible and legal manner. Even though the facility may have paid a hauler to legally transport its waste, the facility remains responsible for any improper management of that waste on the part of the original hauler or any subsequent hauler (if more than one hauler is involved). In addition, keep in mind that the facility remains liable for any harm done by its waste, even harm that may occur after the waste has reached its final destination. Also note that any releases that occur during vehicle crushing activities conducted at the facility are its responsibility as well, even if it is utilizing the services of a portable crusher.

### ***WHAT CAN A FACILITY DO IF IT FINDS AREAS OF NONCOMPLIANCE?***

If a violation occurs at a facility, IDEM has a policy in place which allows for a potential reduction in penalty for violations voluntarily reported to the agency. This policy, called the Self-Disclosure and Environmental Audit Policy, allows for a reduction in, or total elimination of, penalties if certain conditions are met. In addition, reporting and correcting the violation as soon as possible may limit the actual and/or potential harm to human health and the environment and result in reduced clean up costs.

A copy of IDEM's Self-Disclosure and Environmental Audit Policy can be obtained by visiting IDEM's Web site at [www.in.gov/idem/files/npd\\_mp\\_004\\_r2.pdf](http://www.in.gov/idem/files/npd_mp_004_r2.pdf)

A fact sheet describing the policy is located at [www.in.gov/idem/oe/apfsfin1.pdf](http://www.in.gov/idem/oe/apfsfin1.pdf)

Note that a facility cannot use the Self-Disclosure and Environmental Audit Policy if IDEM identifies violations during an inspection or record review.

### ***WHAT HAPPENS IF IDEM DISCOVERS A VIOLATION DURING AN INSPECTION OF A FACILITY?***

If IDEM discovers a violation during an inspection of a facility, both the owner and the manager of a facility can be held responsible. The owner has ultimate responsibility, but the manager is also responsible for the facility that he or she manages. If a facility violates an environmental rule, it may be fined up to \$25,000 per day per violation, depending on the nature and severity of the violation. The amount of the fine, called a 'civil penalty', depends on the magnitude of the



violation, the potential and/or actual harm to human health and the environment, the economic benefit gained by not complying with environmental regulations, and a facility's efforts to achieve compliance.

If an environmental rule is intentionally violated, or if the owner or manager conceals a violation, both may be criminally liable.

The enforcement actions taken by IDEM are part of the administrative enforcement process. There are two types of enforcement actions that may be issued by IDEM: informal and formal actions. Informal actions, which can include actions such as violation letters are those which notify the inspected facility of minor violations found by IDEM during a record review or facility inspection. The informal action will list the violations discovered. Some informal actions will specify the type of action that must be taken to return to compliance. A date by which a facility must return to compliance may be included in the action, as well as the name and telephone number of the IDEM inspector assigned to the case. In most cases a follow-up inspection will be conducted to verify if the facility has corrected the violations as stated in the violation letter.

A formal action, called a Notice of Violation (NOV), is issued to a facility or a person (referred to as the "Respondent") when a record review or inspection finds significant or serious violations of environmental laws. The NOV informs the Respondent of violations that IDEM believes were present at the time of the record review or inspection. In order to resolve the NOV, the Respondent must negotiate an Agreed Order with IDEM and comply with the terms of that order. Generally, an Agreed Order will also include a civil penalty. Upon the Respondent's compliance with all terms of the Agreed Order, IDEM may issue the facility a letter stating that the facility has been returned to compliance for purposes of that particular enforcement action.

Should an Agreed Order not be negotiated within 60 days of issuance of the NOV, IDEM may issue a Commissioner's Order. This unilateral order specifies the actions to be taken by the Respondent in order to return to compliance. The Respondent may request judicial review of a Commissioner's Order.

For more information, see the following IDEM webpage at: [www.in.gov/idem/4107.htm](http://www.in.gov/idem/4107.htm)